THE LAW OF RADIO COMMUNICATION

BY

STEPHEN DAVIS

Solicitor of the Department of Commerce; Formerly Associats Justice of the Supreme Court of New Mexico.

> Awarded the Linthicum Foundation Prize, by the Faculty of Law of Northwestern University, under the Charles C. Linthicum Foundation, June, 1927.

> > FIRST EDITION



To enter at this time upon a discussion of the law of radio communication when that law has not yet come into being, is on a small scale to follow the great Lord Chancellor Francis Bacon of whom it has been said that he "threw out the plan of a universal dictionary of sciences and arts at a time when, so to say, neither arts nor sciences existed," and that when it was impossible to write a history of what was known, he "wrote one of what it was necessary to learn."



To

HERBERT HOOVER

WHOSE WISE GUIDANCE IN THE FORMATIVE STAGES OF RADIO COMMUNICATION CONTRIBUTED SO GREATLY TO THE DEVELOPMENT OF THIS NEW SERVICE TO THE AMERICAN PEOPLE.



PREFACE

In the original preparation of this work, there was no publication purpose. My duties in the Department of Commerce during the past few years gave me an intimate connection with the whole radio situation. It early became apparent that although much study had been given to the technical aspects of radio development, the legal features had received only the very slightest consideration, and, since a system was growing up which involved most intimate relationships between its members and the government. between itself and the public, and between its own units, it seemed almost as important to determine the basic legal rules upon which those relationships must depend, as to develop the technical features through which they might This study of the law of radio communication was originally undertaken entirely for my own information and guidance, with the determination of these legal rules in view.

There is no attempt in this work at exhaustive treatment of such subjects as the police power of the states or Federal authority over interstate commerce nor is there any effort or desire to duplicate the volumes which have been written about these subjects. The principles are stated to the extent considered necessary in their application to problems arising from radio communication and a very few illustrative cases are cited from the hundreds available. There is no dearth of material for anyone who may desire to pursue these features in more detail.

The discussion of abstract principles is always difficult. In the absence of specific causes of litigation, it becomes necessary to imagine a condition, to create facts arbitrarily, and to apply legal rules to the situation thus presented.

viii PREFACE

A slight change of fact in actuality may entirely alter legal results. Yet, in the field here covered, the lack of particular cases makes speculation the only recourse.

In the hope that this discussion may stimulate thought on the legal phases of radio communication and may be helpful in the reaching of right conclusions, this work is presented to the public.

THE AUTHOR.

Washington, D. C. June, 1927.

CONTENTS

	Preface	-	Vii Va Ge
Ceapte I.	Present Conditions		1
II.	THE RIGHT TO ENGAGE IN RADIO COMMUNICATION		14
III.	Federal Jurisdiction		22
IV.	FEDERAL STATUTES PRIOR TO THE RADIO ACT OF 1927		32
V.	The Radio Act of 1927		54
VI.	STATE JURISDICTION		81
VII.	Conflicting Rights in Reception and Transmission		108
VIII.	BEOADCASTING OF COPYRIGHT MATTER		134
1X.	CONTROL OF BROADCAST PROGRAMS		140
X.	LIBEL AND SLANDER		157
XI.	INTERNATIONAL LAW		175
	Appendix		186
	INDEX		001



THE LAW OF RADIO COMMUNICATION

CHAPTER I

PRESENT CONDITIONS

The growth of law follows social and economic development. Rules of conduct arise when there is subject matter upon which they may operate. Legislatures make their enactments to meet existing conditions, to prevent abuses already in practice or imminently threatened. Courts deal with controversies which have actually arisen. Legal progress consists in applying old principles to new conditions. Railroads and automobiles, telegraphs and telephones were invented, struggled for existence, and came into operation before there was special law for them; yet today, under statutes and judicial decisions, each has its own particular and comprehensive code, regulating its conduct and determining its rights and liabilities. Their rules were developed slowly, step by step, conflicting legal claims being determined one by one as they received judicial or legislative attention, until the settlement of particular problems resulted in a great body of recognized law. The process still goes on.

Radio communication is passing through the same stages. Starting as a scientific experiment, with unparalleled rapidity it has gained a high place among the communication systems of the world, but it is still so young that rules for its conduct are yet largely undetermined. Excepting litigation over patent rights, few controversies have reached the

¹ Rights in inventions and liabilities for infringement fall within the general law applicable to patents, not under the law of radio communication, and are, therefore, not within the scope of this work.

2: THE LAW OF RADIO COMMUNICATION

courts. But the extent and intimacy of its activities, the complexity of its operations, the novelty of its characteristics have created new relationships and peculiar problems in the application of established principles, which will inevitably press for solution.

Before entering into the discussion of legal features, it is essential to arrive at a clear knowledge of present conditions in radio communication, what it is and what it is doing. For it is of many kinds, and its element differs fundamentally from one another in character and in legal implications. A rule applicable to a public utility engaged in communication by radio telegraph may not have the slightest relation to the operations of an amateur experimenting with the radio telephone. Only by a thorough grasp of the existing situation may we understand the problems, the methods for their solution and the application of the legal rules, whether by legislation or judicial decision, under which rights and obligations are to be determined.

In every communication, there are at least two persons, one who sends and one who receives, and so radio necessarily has both a transmitting and a receiving end. The voice which enters our homes has its utterance elsewhere and is sent out by transmitting apparatus which may be a hundred or a thousand miles away. As to how it traveled from one to the other, there is plenty of theory but little real knowledge. We are told of a mysterious something called "the ether" in which move progressive disturbances having wavelengths and frequencies, but actual proof of its existence is lacking. We are in the realm of hypothesis. Yet the theories do fit the facts and explain the observed phenomena, and so we accept them and use the terms as glibly as though we thoroughly understood their meaning.

The important thing is that by radio it is possible to take a sound produced at one place and to reproduce it at the speed of light at another place or at many other places at one and the same time and by one operation. Although most of us think of broadcasting when we think of radio at all, and in popular use the two terms have come to be almost synonymous, as a matter of fact, it is by no means the most important radio phase. Less than 700 of the transmitting stations in the United States, on January 1, 1927, were engaged in broadcasting. The numbers of privately owned stations in the various classes on that date were as follows:

Transoceanic stations	22
Technical and training	38
General public service (coast stations)	63
Point to point, limited public service	74
Experimental	179
Point to point, limited commercial	207
Broadcasting	671
Ships equipped	2,035
Amateur	14,768
Total	18,057

Marine Service.

Radio communication found its first use some twenty years ago as a means of transmitting messages between ships and from ship to shore. The land had long enjoyed efficient communication, but until the advent of radio. the sea had none. The vessel leaving harbor remained voiceless until it again reached the shore, except for occasional chance conversation or signal exchange with a passing vessel. It could not call for aid in time of peril; its master could not receive instructions from the owner: passengers could not communicate. It was utterly isolated, self-contained and self-dependent. Radio revolutionized the situation and quickly became a marine necessity, as much as lifeboats or other protective equipment. There is no compilation to show the number of lives or the amount of property saved by radio from the perils of the sea, but they doubtless reach surprising totals. The transoceanic passenger today may put himself in touch

with either shore whenever he pleases. The ocean use of radio was first in time, and it remains first in importance.

Transoceanic Service.

There is only a difference in distance between the establishment of communications from shore to ship and the sending of a message to a sister land station across the sea. The step was soon taken. In 1919, American development of transoceanic radio communication commenced in earnest. It has grown rapidly. Unlike the field of marine communication where radio has sole control, transoceanic service has a strong rival in the submarine cables, which link the countries of the world. The two systems are highly competitive and each has a certain advantage in service. The cables have no atmospheric disturbances to cause interruption or delays, while radio can give direct service to interior points which the cables cannot reach except by land-line relays. Direct circuits are now in operation with Great Britain, France, Germany, Sweden, Holland, Poland, Italy, the Argentine Republic, Brazil, Hawaii, the East Indies, Japan, and the Philippines. Stations at New Orleans and Miami furnish service to Central America, operating circuits with Panama, Costa Rica, Honduras, Guatemala, Nicaragua, and Colombia. The investment by American concerns in such stations amounts to over \$12,000,000, and the radio companies do about 60 per cent of the transpacific and 20 per cent of the transatlantic business. Besides these, there are a large number of powerful stations operated by the navy, keeping in touch with its ships and furnishing commercial service where private stations are not available. than 600 naval vessels carry radio equipment.

Amateurs.

By far the largest class of radio stations, numerically speaking, is made up of those operated by the amateurs. In 1912, they numbered a few hundred. There are now

over 14,000. Organized in the American Relay League, they form a network covering the United States and have connections with foreign countries. The demands of commercial service have continually crowded them into channels considered least desirable. The urge of necessity plus unceasing effort and experimentation have played a considerable part in converting these channels from the worthless to the valuable. The amateurs have earned and won an outstanding position in the radio family.

Telephony.

The services so far referred to are carried on mainly by telegraph. Telephonic communication, the reproduction of voice or sound as distinguished from the transmission of dots and dashes, is a more recent development. It commenced on a practical scale six years ago, and reached its apex in the recent opening of a transatlantic circuit which makes possible conversations between New York and London as simply as by long-distance lines in this country, a service capable of indefinite expansion.

Broadcasting.

Broadcasting, as the expression is commonly used, is but one form of radio telephony. It is the most popular and at the same time the most troublesome member of the radio family. It has created new values and new difficulties. It raises unheard-of legal problems. It has won its place without legal authority and with little financial basis. Yet it is the foundation for an immense industry.

For the year 1921, the total sales of radio apparatus did not exceed one million dollars. In 1926, they were more than four hundred millions. There are now about 700 broadcasting stations, whose cost of construction varies from a few thousand dollars to nearly half a million, probably representing a total of over fifteen millions. The annual expense of upkeep and operation is close to the same figure.

The number of receiving sets in use is unknown but they probably exceed five millions, and it has been estimated that there are over twenty million radio listeners in the United States. A speaker at a recent banquet in New York boasted that his words were being heard by a quarter of the people of the United States, and, allowance being made for the license permissible on such occasions, his statement may not have been far from the truth. Whatever the percentage may be, a great and growing number of people look to radio broadcasting for relaxation, entertainment, and information. It is becoming as indispensable a feature of the American home as are other common household utilities, the telephone and the incandescent lamp.

Investment in manufacturing plants runs into the hundreds of millions of dollars, and hundreds of thousands of our people are employed directly or indirectly in the manufacturing or distribution of radio equipment.

Broadcasting and the activities dependent on it have thus acquired a highly important place in American industry.

American broadcasting is distinguished from all other forms of communication in that those who enjoy its service make no direct payment for it. The listener pays neither toll nor tax. The entire maintenance of broadcasting is gratuitous so far as the listener is concerned. This is not true in other countries. Broadcasting abroad is financed upon the principle that those who receive should pay. Great Britain, second only to the United States in broadcasting development, imposes a tax in the form of a license upon receiving sets, and the operating expense is paid from the proceeds. Other countries have similar systems. In America alone is the operation of a receiving set open to everyone without tax or payment, and in no other land is the service so extensive or so efficient.

The value of the wire telephone and telegraph lies in the power to furnish private means of communication between two particular individuals. The essential quality of broadcasting is precisely the opposite. Its value is in its diffu-

sion. It is more akin to the printing press. Printed matter serves to bring the thoughts of one to the minds of many through the eyes. Broadcasting does the same thing through the ears. It allows the individual to communicate simultaneously with a multitude of his fellowmen, however widely scattered.

It lives at the will of the receiver, while other communication services cater to the sender. Since the pleasing of the listener is the primary purpose, every broadcaster now selects according to his own judgment what he will broadcast. He rejects matter which he considers undesirable, in the belief that indiscriminate use might easily destroy the reputation and prestige of his station and do much more harm than could be compensated by any payment received, not to mention a possible liability for defamatory matter.

In this respect, the broadcaster is in the same position as the newspaper owner who opens or closes his columns to news or views according to his own wish or interest.

Classification of Broadcasters.

Of the principal stations operating in the United States in 1926, 124 were owned and operated by mercantile establishments, 94 by schools and colleges, 43 by churches, 35 by newspapers and other publications, 30 by manufacturers, 15 by states and municipalities, 15 by banks and insurance companies, and 12 by hotels.

Motives for Broadcasting.

Probably a few of the larger manufacturers of radio apparatus would continue to broadcast even though the use of their names was prohibited. If there were no broadcasting, there would be no listeners and no sales of sets. But excepting these classes, and likewise charitably excepting churches and educational institutions, there is only one motive impelling the expenditure, and that is the desire for publicity. It is a simple case of self-advertising. There are a few individuals whose desire for self-expression finds satisfaction in the mere fact of publicity without ulterior

end. The department store believes that the publicity resulting from the mere repetition of its name many times nightly fixes its identity in the minds of customers and is translated into increased sales. The manufacturer is in the same position. All consider that they are recompensed for their outlay or they would not continue to make it. There is no more philanthropy in this business than in any other.

Paid Advertising.

From the condition in which each prospective advertiser must build and operate his own station to the plan of hiring a station already built is a natural step, yet one which was taken slowly. The practice of "selling time," in other words, the renting out of a station's facilities, is a development of the last two years. It spread rapidly and a large proportion of the more important stations now engage in it. Charges run all the way from \$25 to \$600 an hour, varying with the character and reputation of the station and the extent of its audience. In theory, the toll is primarily based upon the number of persons who hear the program, just as newspaper and magazine rates are based upon circulation, though a primary difference lies in the fact that the publication knows and can prove its circulation, while a broadcasting station can only estimate its listeners.

Use of Wavelengths for Broadcasting.

The pioneer broadcasting station of the world is Station KDKA of Pittsburgh, erected in 1921. It marked a path that was soon followed by a multitude. Stations sprang up in all parts of the United States. No one located or spaced them according to service needs or under any preadopted plan. They merely grew. Some communities are oversupplied with stations and other sections lack them. We have crowding and congestion in most places. All available wavelengths are in use. The radio streets are filled and the parking places all occupied. The situation involves a new field of legal rights and liabilities.

Science and present technical knowledge as exemplified in transmitting and receiving apparatus permit the use of only a limited number of ether channels. We are occasionally told that this limitation will be lessened or done away with by new invention, and that may happen, but today's radio communication must be conducted on the basis of present knowledge.

So far as we know now, no two stations can operate close together on the same channels at the same time in substantially the same listening territory, and each one must even have a little elbow room as against his neighbor. When they conflict, the situation is much like that of two trains attempting to pass on a single track. Since most of the legal questions in radio, whether of governmental regulation or mutual rights, arise out of this situation, it is essential to understand its causes and effects.

Theoretically, at least, the emanations from a transmitting station travel in the form of waves. The distance from crest to crest is called the length of the wave or the wavelength and is measured in meters. There is no such actual permanent thing as a wavelength, any more than there is an inch or a yard or a mile. It is merely a unit of measurement, characteristic of station radiation. The station sends out a certain number of waves each second. This number fixes its frequency and is measured in kilocycles. To say that a station operates on 500 kilocycles, or 600 meters, means that it sends out 500,000 waves per second, each 600 meters long. Frequencies run into the millions per second.

The use of the word "wavelength" may easily become an impediment to clear thinking. It has become so habitual in radio parlance that we visualize it as connoting an actual thing, physically susceptible of ownership and use. It is really only a convenient expression indicating operation of radio apparatus in a particular manner so as to cause certain results. It is in that sense that the word is used throughout this discussion.

Voice or music consists entirely of vibrations, and in order to secure quality when transmitted by radio, it is essential that all the vibrations be carried without discrimination. When a radio wave is carrying speech or music, it is accompanied by these vibrations on either side of its main frequency, as high as 5,000 a second, and it occupies therefore a channel 10,000 cycles, or 10 kilocycles, in width. No other station can trespass in this channel without potential interference. It follows that the frequencies used by broadcasting stations must be separated by at least 10 kilocycles if interference between them is to be avoided.

The receiving set, to be efficient, must therefore have the ability, under normal circumstances, to select among stations whose frequencies are separated by only 10 kilocycles, assuming a reasonable ratio to the strength of the waves. This means that such a set is so delicately constructed and adjusted that it responds to waves coming at the rate of 1,000,000 a second and disregards those at 990,000 a second. The mind is hardly able to grasp such speeds, and the difference is so small as to be almost inconceivable. Yet the set works, and this characteristic makes it possible to select among the crowding voices, to hear one and exclude the others. But there must be at least the 10-kilocycle separation between them or the receiver cannot exclude without destroying musical quality and speech intelligibility.

Wavelengths were assigned by the Department of Commerce from 1912 until 1926, when an opinion of the Attorney General held that authority to do so had not been conferred. Thereafter, until the passage of the Radio Act of 1927, station owners were free to select their wavelengths at their individual desire.

The present broadcasting band covers wavelengths from 200 to 545 meters, which, expressed in kilocycles, includes those from 1,500 to 550, or 950 kilocycles in all. Obviously, therefore, there is the possibility of using only 95 channels, spacing them 10 kilocycles apart, in this entire band. Necessary consideration for channels used in Canada has

reduced the available channels to 89. Since 1923, there have continuously been more than 500 stations in the United States, each requiring a wavelength, so that it has been mathematically impossible to provide a separate channel for each.

Wavelengths for Telegraphic Use.

The shortage in wavelengths is by far the most pronounced in the broadcasting band. It amounts to exhaustion. In the telegraphic field, conditions are not so bad, but available channels are being occupied with rapidity. Possible channels are theoretically infinite in number, but practical use is always limited by the capacity of the apparatus. As point-to-point service and telegraphic broadcasting develop, as both give signs of doing, it may be a comparatively short time before they are equally congested.

International Services.

In the international field, there is neither allocation of wavelengths nor other regulation, except for marine use. The transoceanic stations avoid each other's channels as a matter of mutual accommodation as well as necessity. International agreements may become essential, but none is in existence now.

Call Letters.

The custom of designating each station by call letters is a survival of the sca. It was much easier for a ship to identify itself, or to call another by using a combination of three or four letters than by spelling out its name. A dozen ships might have the same name, but a letter combination belonged to it alone. The same principles applied to the shore stations in a lesser degree, and they followed the practice.

The nations of the world have now divided the alphabet among them. In the partition, the United States received all combinations beginning with either N or W, and part of these commencing with K, the remainder of the K's being

split between Germany, Danzig, and Latvia. For this reason, all stations in this country have combinations beginning with one of these letters. In practice, the Department of Commerce has, with a few exceptions, assigned the letter W to stations east of the Mississippi River and K to those West. There is no danger of a shortage of call letters, but it is not always possible to give a station the combination it desires. There has grown up a tendency among broadcasters to select letters corresponding to the initials of the station owner, signifying its location, answering to its slogan, or otherwise typifying the station. WGN, WLS, WJAX, and WPG are examples, and there are many others. In broadcasting, call letters serve no very useful purpose, though they are convenient as a means of reference and for announcements, and become identified with the reputation of the station to such an extent as to have real advertising value. One station has been honored by having its letters adopted as a brand for candy, and another as the title of a garage, which has raised the question as to whether there can be title in letters. Can any man own the alphabet or a meaningless arrangement of a part of it?

Legal Problems.

Every development that has a major effect upon the lives and activities of individuals, their business and their interrelations, necessarily brings with it new questions of rights, duties, and liabilities. Communication by radio is no exception to the rule. Affecting as it now does a large majority of our entire population, expanding continually on its commercial side, it is bound to bring with it many conflicts and controversies. Some have already appeared, others are in the offing, and, doubtless, more will arise that are not now even anticipated.

The fundamental principles on which the entire industry depends have not been clearly determined, still less judicially declared. The right of the listener to uninterrupted reception and of the sender to transmit without interference, the legal status of the transmitter, conflicting claims to wavelengths, the power of Federal and state regulation and the line between them, ownership of program and broadcast material, including the control of rebroadcasting, liability for defamatory matter, international relationships, are subjects which have received discussion but no determination. The field is still virgin. The statute law, which always lags behind commercial development, does not afford a complete answer. For solutions we must look to the principles of the common law with its fundamentals of social justice, and the elasticity and flexibility which keeps it living and growing as society progresses.

It is always difficult to apply a general principle to a specific condition, and this is particularly true in a situation as novel and complex as radio. There is no room for dogmatism, and it is necessary to indulge largely in speculation. Authority and precedent are lacking; the course is uncharted. Yet speculative analysis is justified, for we are in the field of legal uncertainty. Only by full discussion and the consideration of probabilities may we find the solutions upon which radio progress in the immediate future largely depends.

CHAPTER II

THE RIGHT TO ENGAGE IN RADIO COMMUNICATION

Radio Communication a Natural Right.

The right to build and operate a radio transmitting station or receiving set is as natural and inherent as to engage in any other legitimate human activity. Fundamentally, it is not a matter of governmental grant or privilege. The individual who owns real estate may erect upon it what he pleases. Having the necessary materials, he may construct such apparatus and appliances as he chooses. If he builds a transmitting station, he owns it as absolutely as any other piece of property and has the same right to its use. He may find his operations regulated by government under the police power, the taxing power, or the authority to regulate interstate and foreign commerce, and he must subject himself to the ordinary legal rules which govern his relationships with his fellow men, but in all these respects he is on an equal plane with the other members of his community. In any legal discussion, it is well to keep in mind the realization that conducting radio communication is not a matter of grace or favor, but only one of the manifold modern activities in which anyone may engage, whether for business or pleasure, subject only to the ordinary limitations governing human conduct.

It is well also to dismiss from our minds any thought that the right to carry on radio communication is to be distinguished or differentiated from other enterprises because of the necessary use of the air or ether. It has been argued that radio transmission necessarily passes beyond the area belonging to the owner of the station; that it trespasses upon the land of others, whether upon the surface or far above; that it uses channels through the ether which belong to the public as to streets and highways; and that consequently there is always an invasion of either private or public rights. Private ownership of air space is seriously lurged. These various positions are somewhat inconsistent with one another, are for the most part unfounded on fact or science, and are misleading in conclusion; yet iteration makes some discussion of them necessary.

Ownership of the Ether.

The force by which signals are sent from the transmitting to the receiving station, whatever it may be, in traversing the space between the two points presumably passes through something. We think of it as traveling in the air, but that is not altogether correct, for it penetrates not only the air but the earth, the walls of houses, and other solid bodies in which no atmosphere is present. For want of a better term, scientists have designated as the "ether" the hypothetical substance which is supposed to exist between and surrounding the atoms or electrons of all matter and through which the radio wave is assumed to travel. What the ether is, whether it actually has materiality, and, in fact, whether it really exists, is not today susceptible of positive demonstration.1 Attempts have been made to obtain Congressional declarations that the ether belongs to the Federal government, and the Joint Resolution of Congress, approved December 8, 1926, was seemingly based upon the idea of ether proprietorship.2

It is difficult to grasp this theory of ownership. It involves the possibility of title to the non-existent. Whoever claims ownership of a thing or substance may very properly be required to prove existence before discussing title. Up to this date in legal history, courts have not lent the judicial ear to controversies over the hypothetical.

^{1 &}quot;Science for a hundred years reasoned its way to an 'ether,' which is now in high disfavor with the physicist elite." DURANT, "Story of Philosophy," p. 184.

¹ See p. 64.

No Title in Government.

But even though the ether had material existence so as to be susceptible of ownership, there would still be a flaw in the argument of those who assert title in either Federal or state government. Certainly, it does not belong to the |United States, whose limited powers are defined and restricted by the Constitution. That document will be read in vain in search for any applicable provision. The power to regulate commerce obviously does not confer title to the medium by or through which that commerce is carried on. Sovereignty, police power, and regulatory control are wholly distinct and independent of ownership. The Federal government exercises full jurisdiction over navigable waters; yet it does not own them, nor their beds. nor their banks. So likewise with the states. They may have sovereignty over everything within, below and above their areas, but not proprietorship. We sometimes use language implying that everything not held in private ownership belongs to the public or to the state, wild animals, for example, or running water, but, paradoxical though it seem, the expression is equivalent to its exact opposite and really imports ownership in no one. The very idea of ownership implies individual benefit to the exclusion of others.1 We may therefore safely conclude that no "ownership of ether" constitutes a danger to radio communication.

Private Ownership of Air Space.

The theory of radio trespass in upper air space is always and exclusively founded upon the ancient maxim cujus est solum, ejus est usque ad coelum (whoever has the land possesses all the space upwards to an indefinite extent).²

¹ "The conception of property is exclusiveness, the rights of exclusive possession, enjoyment, and disposition. Take away these rights and you take all that there is of property." The Pipe Line Cases, 234 U. S. 548, 571.

² I COOLEY, "Blackstone," p. 445. "The estate of an owner in land is grandiloquently described as extending ab orco usque ad coelum," Justice Brandeis in Penn Coal Company v. Mahon, 260 U. S. 393, 419.

In other words, the boundaries of any tract of land are planes converging as they pass below the surface of the earth until they meet in the common center and diverging as they rise upward until they are separated by whatever distance infinity will permit. That seems to be the fairest way to express the rule, it being difficult under the modern conception of the universe to draw the lines to conform precisely to the astronomical ideas of the author of the maxim.

Our law is found in legislative enactments and decisions of courts having jurisdiction over the subject matter upon which they pass. There is no statute making effective the maxim under discussion. Obviously there could be no ancient court decision adopting or declaring it authoritatively, for neither the bowels of the earth nor the heights of the heavens could then, even as much as now, be the subject matter for adjudication in a tribunal.

The maxim is of ancient origin. The first mention of it in English jurisprudence seems to be in its citation by Croke, a law reporter. It is apparently not found in the Roman Law, and has been traced to a glossator's note about 1519.

Maxims and general principles are useful only so far as they help in the solution of particular problems. They owe their existence to a general acceptance by mankind based upon experience and may gain or lose vigor with changing conditions. The political or philosophical aphorism of one generation is doubted by the next, and entirely discarded by the third; the race moves forward constantly, and no Canute can stay its progress.⁴

¹Cro. Eliz. 118. See Hazeltine, "The Law of the Air," p. 62.

¹ Montmorency, "The Control of Air Space," The Grotius Society, vol. III, pp. 63, 65; Baldwin, American Journal International Law, vol. 4, pp. 95, 97; Professor Coudy," Two Ancient Brocards," London, 1913; J. M. Spaight, "Aircraft in Peace and War," p. 54.

Report American Bar Association, 1912, p. 515, and see Spaight, supra.

⁴ Borgnis v. Falk Company, 147 Wis. 327; 133 N. W. 209.

So far as the maxim under discussion is founded on practical application, it is a valuable expression of a general rule. It has been referred to as a "fanciful phrase." When the attempt is made to extend it to untried fields, absurdity results. Courts have refused to do so. They have confined it to that portion of the earth which may be used for trees and structures. The very basis of property is possession. All ownership is postulated upon possibility of control, and that which may not be possessed may not be owned. As said by Justice Holmes, "possession is the beginning of ownership." Full vigor is given to this maxim when the title of the owner of the surface is recognized as including the space under or above his land so far as he is able to occupy it, and no farther. As has been said:

The rule or maxim giving the right of ownership to everything above the surface to the owner of the soil has full effect, without extending it to anything entirely disconnected with or detached from the soil itself.³

As thus qualified, limiting title to that which may be used and occupied, the rules leave the field of abstruse theory and enter the practical. A similar rule has been adopted by two trial courts which considered trespass on air space by airplanes.

Entry on Private Property.

But the radio waves do not confine themselves to space high above the earth. If they did so, they would be useless to man, because beyond his reach. They come within antenna height, penetrate walls, and enter ground and

¹ Board v. United Telephone Company, 13 Q. B. D. 904.

² Missouri v. Holland, 252 U.S. 416, 434.

³ Hoffman v. Armstrong, 48 N. Y. 201; 6 Am. Rep. 537, 539. And see to same effect, Butler v. Frontier Telephone Company, 186 N. Y. 486, 79 N. E. 716. Skinner v. Wilder, 38 Vt. 115.

⁴ Unreported Minnesota District Court case, Michael, J., Commonwealth v. Nevin, 2 Dist. & Co. Rep. 241. All this discussion is much more germane to the law of aviation than to that of radio. It is fully treated by Captain Greer, "International Aerial Regulations," Air Information Circular, July 15, 1926.

dwellings, and the question of the right of the property owner is therefore wholly independent of the upward extent of his title. Indeed, discussion of invasion of upper air space is really only academic. The entry of the radio wave, if there is one, is general on property, and inquiry must therefore be directed to its character rather than location.

A radio wave passing through air, earth, rock, brick, or timber causes no change in the material. The particles of matter remain the same as before, to all practical intents and purposes, their quality unchanged and position unaltered. If we could imagine the space above and below the surface of land to be a vacuum, the radiation would still pass through it. Nothing is added to it and nothing taken away. There is no appreciable effect whatever, certainly no physical entry. The wave cannot be seen, felt, or detected by any of the senses without artificial aid. It is invisible, intangible, and imponderable.

To constitute trespass, as distinct from nuisance or other form of action, there must usually be an entry on land either by a person or by some thing or object which he sets in motion. Walking across the land of another, throwing stones, or casting dirt upon it is actionable trespass irrespective of damage. But damage resulting from acts done outside of the land of the injured party, without physical entry upon it, usually falls within the category of nuisance or becomes actionable because of negligence. In the old nomenclature, recovery is by action on the case rather than by trespass quaere clausum freqit.

Shooting across a man's land so that shot falls upon it,¹ allowing gas to escape so as to injure trees,² pumping water from under another's land³ have been declared trespasses. So have explosions, though on this point the law is in some

Wittaker v. Stangvick, 100 Minn. 386; 111 N. W. 295; 117 Am. St. Rep. 703.

³ Donahue v. Keystone Gas Company, 181 N. Y. 313; 73 N. E. 1108; 106 Am. St. Rep. 549.

¹ Forbell v. New York 164 N. Y. 522; 58 N. E. 644; 79 Am. St. Rep. 666.

confusion.¹ All these cases, however, involve direct physical effect on land and, in most, a resulting injury.

To say that harmless penetrating radiation is an entry or a trespass is to extend legal fiction far beyond the bounds of precedent. Leaving out questions of radio interference, which will be discussed later, and considering only the mere passing of harmless radiation into or across land, it is safe to say that there is no precedent in law, whether based on ownership or otherwise, which would give cause of action or ground for relief. One writer has said, in a discussion of liability for aircraft entry on upper space:²

A more alluring analogy is presented by the case of the hertzian waves sent out by a wireless station, which, in turn, is analogous to hangars and landing places on which aircraft are dependent. No claim for damages in regard to these waves appears to have been made, and indeed is quite unthinkable.

Under the rule *ubi jus ibi remedium*, the novelty of an action is no objection to it, and it has been said that if men will multiply injuries, actions must be multiplied too, for every man that is injured ought to have his recompense,³ and if it is once assumed that an act is wrongful under some established legal principle, it follows that there is some method of legal redress. But we are now dealing not with injuries but, at the most, with technical invasions upon abstract legal rights, quite a different matter.

There is a maxim which seems decisive of the question, namely, de minimis non curat lex (the law will not concern itself with trifles). Courts of justice do not deal with petty and immaterial matters. Confining discussion still to non-interfering radio waves, what could be more trifling or

¹ Thompson, "Negligence," p. 764; Booth v. Terminal Company, 140 N. Y. 267, 35 N. E. 592; Holland House v. Baird, 169 N. Y. 136, 62 N. E. 149; Bessemer C. I. and L. Company v. Doak, 152 Ala. 166, 44 So. 627, 12 L.R.A. (N. S.) 389; Simon v. Henry, 62 N.J.L. 486, 41 Atl. 692; MacGinnis v. Marborough and Hudson Gas Company, 220 Mass. 575, 108 N. E. 364; Watson v. Mississippi River Power Company, 156 N. W. (Iowa) 188.

² American Law Review, 1919, p. 729.

Lord Holt in Ashby v. White, 2 Raym. (Eng.) 938, 955.

immaterial than the radiation now under consideration? A proceeding based merely on the theory that its entrance within a man's property is a violation of his rights is an invitation to the courts to abandon the practical and enter the realm of the abstruse. Such litigation could serve no useful end, and the courts would probably refuse to entertain it under the rule of de minimis, if for no other reason.

It would seem, therefore, that the mere sending into a man's house of an electrical impulse, invisible and undetectable by the natural senses, doing no harm, and causing no annoyance, is an act not within present judicial cognizance. At least, there seems to be no rule of the common law which makes it actionable.

Limitations on Communication Rights.

Although it be true that there is nothing in the character of radio communication which imposes restriction on the right of the individual to engage in it, it does not follow that his right is absolute, unlimited, or free from the possi-1 bility of governmental regulation. In this respect, he is subject to the same rules as those engaged in like legitimate occupations. Contractual obligations, tortious responsibility, and regulatory laws apply to him as to others similarly situated. Limitations upon his right to operate will be found to fall principally under three heads: regulation by the Federal government under its authority over interstate and foreign commerce; regulation by the state under its general police powers, including, as to certain stations, those applicable to public utilities, and the restrictions which arise from his duty to conduct his own activities. however legitimate in themselves, so as not unduly to disturb his neighbors.

CHAPTER III

FEDERAL JURISDICTION

Sources of Federal Authority.

Several of the powers conferred upon Congress by the Constitution have been suggested as sources for Federal right of radio control. They include the power to make treaties with other nations and to carry them into effect by appropriate legislation; to establish post offices and post roads; to declare war; and to "regulate commerce with foreign nations and among the several states."

There can be no question that legislation would be upheld if calculated to carry out the provisions of an existing treaty,² and arguments can be made for the derivation of legislative control from the war power and authority over post roads. It hardly seems necessary, however, to invoke these provisions, for the commerce clause is ample for all purposes.

Transmission of Intelligence is Commerce.

The word "commerce" is necessarily of changing significance. Its meaning broadens as new methods of conducting business and intercourse come into being. The methods of today are far different from those known in Revolutionary times; yet the general language of the commerce clause includes them. Although steam vessels, railroads, telegraphs, telephones, radio, and airplanes are all of later birth, they are only instruments for the carrying on of commercial intercourse, the same in kind though greater in extent. The subject matter of commerce in Revolutionary days was some tangible thing; it meant

^{1&}quot;Power of Congress over Radio Communication," American Bar Association Journal, January, 1925.

³ Missouri v. Holland, 252 U. S. 416.

usually the transportation of merchandise or transit of persons from one place to another. Communication methods were crude. Judicial definitions accorded with the existing system and met all needs. But the chief pride of our law has been its elasticity, and courts had no difficulty in fitting it to new commercial conditions. They applied the commerce clause to transportation by steam vessels and railroads when these great agencies entered the transportation field.

As communication facilities developed and intercourse came to mean the exchange of intelligence as well as of material wares, and electricity began to play its part through the invention of the telegraph and the telephone, judicial decisions did not confine themselves to precedent but expanded to keep pace with progress. It was a long step from the idea that commerce was the actual transportation from one place to another of goods and merchandise to the conception that it embraced the electrical reproduction at one place of dots and dashes originated elsewhere. The courts recognized the difference, the Supreme Court saying that intercourse by telegraph

. . . differs in material particulars from that portion of commerce with foreign countries and between the states which consists in the carriage of persons and the transportation and exchange of commodities, upon which we have been so often called upon to pass. It differs not only in the subjects which it transmits, but in the means of transmission. Other commerce deals only with persons, or with visible and tangible things. But the telegraph transports nothing visible and tangible; it carries only ideas, wishes, orders, and intelligence.

The courts found no difficulty in holding that such communication constituted commerce. One of the earliest telegraph cases² disposes of the question rather summarily as follows:

Is telegraphy any branch of commercial intercourse? To ask the question is to answer it. So interwoven has the custom of communica-

¹ Western Union Telegraph Company v. Pendleton, 122 U. S. 347, 356.

¹ Western Union Telegraph Company v. Atlantic and Pacific States Telegraph Company, 5 Nev. 102, 109.

tion by telegraph become with trade and traffic that to separate it without serious disturbance of vast trade relations and financial transactions would be a task as difficult as to cut the pound of flesh without a single drop of blood. It is the life and soul of civilized commercial transactions; many of the most important are daily ruled by telegraph. The banker, the merchant, the farmer, the broker—all traders depend upon the telegraph for speedy information and means of intercourse in their various businesses and traffic.

In the first case in which the Supreme Court discussed the commerce clause in connection with telegraphy, there appears the following language, almost in terms applicable to radio development:

The powers thus granted are not confined to the instrumentalities of commerce, or the postal service known or in use when the Constitution was adopted, but they keep pace with the progress of the country, and adapt themselves to the new developments of time and circumstances. They extend from the horse with its rider to the stage coach, from the sailing vessel to the steamboat, from the coach and the steamboat to the railroad, and from the railroad to the telegraph, as these new agencies are successively brought into use to meet the demands of increasing population and wealth. They were intended for the government of the business to which they relate, at all times and under all circumstances.

The electric telegraph marks an epoch in the progress of time. In a little more than a quarter of a century it has changed the habits of business and become one of the necessities of commerce.

It is now accepted law that the transmission of telegraph and telephone communications from one state to another constitutes interstate commerce and is subject to Federal legislation and control.²

Radio Point-to-point Transmission is Commerce.

The transmission of communications by radio from one individual to another, usually referred to as point-to-point

- ¹ Pensacola Telegraph Company v. Western Union Telegraph Company, 96 U. S. 1, 9.
- ² Western Union Telegraph Company v. Foster, 247 U. S. 105; Western Union Telegraph Company v. Commercial Milling Company, 218 U. S. 406; Ratterman v. Western Union Telegraph Company, 127 U. S. 411; Leloup v. Port of Mobile, 127 U. S. 640. It has been recently held that the transmission of electric current across state lines is interstate commerce. Public Utilities Commission of Rhode Island v. Attleboro Steam and Electric Company, 272 U. S., decided January 3, 1927.

service, has already reached large proportions. Circuits are operated between the United States and the principal countries of Europe. South and Central America, and across the Pacific to Hawaii and Asia. Although development has not been so extensive between points in the continental United States, and for certain technical and economic reasons perhaps will not be in the near future. vet there are over a hundred American concerns engaged in it, and it constitutes an important service between many communities. It can hardly be seriously contended that communication by this method is not commerce. It is not distinguishable in either legal or commercial effect from its wire competitors. Whether a wire is used to direct and guide the transmission or whether no physical connection is made is immaterial. The radio, wire telegraph, telephone, and cable companies are in the common business of conveying messages from one person to another by electrical processes and, legally, they are of identical character.

Marine Communication is Commerce.

The same conclusion must be reached as to marine communication, both the transmission of messages between ships at sea and between them and the shore. All vessels of importance are now radio equipped, and there are many shore stations which handle their messages. This communication is almost entirely telegraphic. It furnishes the only means of ship communication and is essentially commercial.

Broadcasting is Commerce.

Using the term "broadcasting" as meaning the telephonic transmission of programs to the listening public, it has been argued that the same principles do not apply and that this common and important form of radio transmission does not constitute "commerce." It is said that the broadcaster is not engaged in communicating messages from one person to another, but merely throws out a program which is carried in every direction to be heard by

everyone who chances to receive it; that there is no contractual relation between the broadcaster and his listener, no reciprocity; that neither the receiver, nor ordinarily the sender, pays anything for the service, it being entirely voluntary and gratuitous. These differences exist to some extent and distinguish broadcasting in character from other communication services. Yet the variance is in detail, not in kind.

The characteristic feature of broadcasting is the conveving of the occurrences in one locality to the ears of listeners in other places. While other communication methods devote themselves to particularity and to the service of a known individual, broadcasting depends upon diffusion and service to the unknown many. Its value is in its generality. It picks up speech, music, and song, produced in a studio, hotel, theater, or public hall, by some person or by many, and carries it to the ears of a multitude of others far distant. It conveys the speech of one individual, or songs or music, to others who are waiting to hear Millions of people now expect and receive these radio messages day and night. They rely upon them for instruction, entertainment, and guidance in their business affairs. As a class, the broadcaster knows them and intentionally conveys communications to them. He establishes communication with them just as truly as though he set up a wire connection. The wire telephone transmits the voice of one known individual to another. The radio broadcaster does precisely the same, except that he has many persons at the receiving end. The communications do not differ in principle.

Not Necessary That Commerce be for Profit.

The argument that broadcasting is not commerce because not carried on for profit is equally unsound. The basis for it is largely untrue in fact. A large proportion of broadcasters now actually receive pay for their transmission under established tariffs, frequently several hundred dollars per hour of service, the rate varying with the importance of the station and the number of listeners reached. casting has come to be a recognized medium for advertising and publicity, particularly for those concerns whose activities spread over large areas or as to commodities which are in nation-wide use, or sought to be made such. The concern which wishes to place before the public its name or its wares employs a broadcasting station to send out whatever program or message it believes will accomplish that purpose. It pays for that service, just as it pays for magazine or other advertising and on much the same basis. feature of radio business has become well established. It represents about the only method by which the owner of the station, whose investment is necessarily large, and operating costs equally so, can obtain a return or partly compensate himself for his outlay. It is therefore not surprising that it has had rapid development. There are even instances of church organizations, whose broadcasting may be assumed to be primarily with religious motive, which have entered this secular field so as to meet expenses.

There are broadcasters who do not sell service to others but reserve their stations for their own use. But their motive likewise is usually a financial one. Frequently such concerns are engaged in manufacturing receiving sets or other radio equipment and broadcast in order to stimulate sales, or the owner is otherwise interested in publicity for his own name and business. In any event, some element of financial advantage is always involved, though it be indirect. Two Federal courts have decided that broadcasting of this character is "for profit" within the meaning of the Copyright Act.

There may be a few isolated instances, such as the operations of stations broadcasting religious services only, in which a direct financial element is not apparent, but they

¹ Whitmark v. Bamberger, 291 Fed. 776; Remick and Company v. American Automobile Accessories Company, 5 Fed. (2d series) 411, reversing same case, 298 Fed. 628. See p. 135.

constitute a small fraction of the broadcasting whole, and are relatively of little consequence.

But even though the financial feature were lacking, and there were no element of gain or compensation, broadcasting would still be commerce. Commerce is frequently carried on with other motives. Neither the Interstate Commerce Acts, the Navigation Laws, the White Slave Act, nor the Dyer Act (relative to the transportation of stolen automobiles) makes financial gain an element in commerce. Examples might easily be multiplied.

The Attorney General of the United States¹ has expressed the opinion that "whether the transmission is for profit is immaterial so far as the Commerce clause is concerned."

Amateur Communication.

Amateur stations outnumber all other classes in the United States and are scattered over the entire country. Their transmission is chiefly by the telegraphic code, and is carried on for pleasure and experimentation. Although these stations constitute in fact a communication system covering the United States, they are not used for gain. But nevertheless the sending of messages back and forth among the members of this class does constitute communication between them and, in spite of the lack of a financial element, would doubtless be considered commerce under the rules already discussed.

Power of Federal Regulation.

Assuming, therefore, that communication by radio is commerce, Congress has authority to regulate it whenever the transmission is interstate or foreign, or whenever, if wholly intrastate, it interferes with interstate or foreign

¹ Opinion of Attorney General to Secretary of Commerce, July 8, 1926, citing American Express Company v. United States, 212 U. S. 522; Caminetti v. United States, 242 U. S. 470. See also Whitaker v. Hitt, 285 Fed. 797; Kelly v. United States, 277 Fed. 405; Brooks v. United States, 267 U. S. 432; Covington Bridge Company v. Kentucky, 154 U. S. 204, 218; and Hoke v. United States, 227 U. S. 308.

communication, or the two are so commingled or interwoven that they cannot be separated for regulatory purposes.

Interstate Character.

Radio communication may constitute either domestic, interstate, or foreign commerce. A station on Long Island communicating with Europe is engaged in foreign commerce. When it transmits to San Francisco, its commerce is interstate. Its communications with ships within the territorial waters of New York or between other points in the same state is intrastate and with vessels on the high seas is foreign. Radio business may therefore fall within all classes, just as that of a railroad or telephone or telegraph company. Generally speaking, however, it may be said that all radio transmission has an interstate character. Even when intended as a communication between two points or persons in the same state, only the very exceptional signal confines itself within state boundaries. If it did so, its very presence might seriously interfere with interstate communications. The regulation of purely intrastate radio activity may therefore be essential to the orderly conduct of interstate communication.

Intermingling of State and Interstate Transmission.

When wholly intrastate, radio communication is subject to Federal control if it results in interference with the messages coming into the state or going from it which constitute interstate commerce. Perhaps the applicable rule can be expressed by saying that if the station is in fact an isolated unit, keeping its emanations within the state boundaries, separate and apart from the general mass of interstate communication, it remains free from Federal control. If its effects pass beyond the boundaries or enter the common radio highway within the state, they must be so conducted as not to cause disturbance of reception from outside, or they become subject to regulation to compel proper behavior, and in this connection it must be remembered that the interference range of a radio telephone is usually much

greater than its communication range. It may, and frequently does cause a whistle, usually called a heterodyne, which enters the receiving set to the disturbance of the desired message far beyond the area in which its own communication is intelligible or audible. Whenever there is conflict between intrastate and interstate transmission, Federal authority is paramount. There is no absolute precedent for this conclusion, that is, no decision laying down such a rule as to radio, but the railroad cases furnish a complete analogy.

Railroad Analogy.

While, theoretically, the interstate and intrastate operations of railroads are separate and distinct and fall under either Federal or state jurisdiction, according to their character, the practical following of the rule has become more and more difficult as they have become increasingly complex. The policy of Congress and decisions in the courts have determined Federal supremacy and imposed Federal control on intrastate operations when necessary to protect and maintain the interstate system. The Supreme Court of the United States, in the Minnesota Rate Cases, declared the applicable rule, saying:

The authority of Congress extends to every part of interstate commerce, and to every instrumentality or agency by which it is carried on; and the full control by Congress of the subjects committed to its regulation is not to be denied or thwarted by the commingling of interstate and intrastate operations. This is not to say that the Nation may deal with the internal concerns of the state, as such, but that the execution by Congress of its constitutional power to regulate interstate commerce is not limited by the fact that intrastate transactions may have become so interwoven therewith that the effective government of the former incidentally controls the latter. This conclusion necessarily results from the supremacy of the national power within its appointed sphere.

And again in Dayton-Goose Creek Railway v. United States,2 the court said:

^{1 230} U.S. 352, 399.

² 263 U.S. 456, 485.

In solving the problem of maintaining the efficiency of an interstate commerce railway system which serves both the states and the Nation, Congress is dealing with a unit in which state and interstate operations are often inextricably commingled. When the adequate maintenance of interstate commerce involves and makes necessary on this account the incidental and partial control of intrastate commerce, the power of Congress to exercise such control has been clearly established.

Application to Broadcasting.

One court has discussed this subject as follows:2

Undoubtedly, Congress will undertake to control the use of broadcasting stations, under its constitutional power, at some time in the future, and, in view of the fact that it has the power to regulate communication between states, it would probably, also, have the right to regulate broadcasting stations, even though not engaged in broadcasting from one state to another, on the ground that the general subject was one which came within the commerce clause of the Constitution. In order to make it effective, it necessarily follows that it would have the right to control others engaged in the same line of operation; namely, in broadcasting, if such broadcasting should result in an interference with those stations actually engaged in broadcasting from one state to another.

The Act of August 13, 1912.

By the Act to Regulate Radio Communication,³ Congress dealt with the possibility of interference between state and interstate operations, requiring a license not only for interstate transmission, but for the transmission of radiograms or signals, the effect of which extends beyond the jurisdiction or territory in which the same are made, or where interference would be caused thereby with the receipt of messages or signals from beyond the jurisdiction of the state or territory. It is noteworthy that so early in radio experience there was legislative recognition of interference effects extending beyond the communication area. The same principle is observed in the Radio Act of 1927.

¹ See also Houston, etc., v. United States, 234 U. S. 342; Wisconsin Railroad Commission v. Chicago, Burlington, and Quincy Railroad Company, 257 U. S. 563; United States v. New York Central Railroad Company, 47 Sup. Ct. 130 (Nov. 22, 1926).

³ Judge Wilson, The Tribune Company v. Oak Leaves Broadcasting Station Inc., Circuit Court of Cook County, Illinois, November, 1926, not reported. ³ 37 Stat. 302.

CHAPTER IV

FEDERAL STATUTES PRIOR TO THE RADIO ACT OF 1927

Act of June 24, 1910.

The earliest Federal law having any relation to radio communication is the Act of June 24, 1910, amended July 23, 1912. It is not a regulatory act but is directed solely to the safety of life at sea.

The act requires all steam vessels leaving any port in the United States and carrying fifty or more persons, including the crew, to be provided with radio apparatus capable of transmitting and receiving, day or night, over a distance of 100 miles. It requires two operators and constant watch, although cargo steamers may use a competent member of the general crew as one operator. It compels vessels "so far as physically practicable to be determined by the master" to exchange messages with other stations using different systems. The law applies equally to American and foreign vessels using our ports. It excepts steamers plying between ports or places less than 200 miles apart. This act is still in force.

The 1912 Law.

August 13, 1912, Congress passed "An Act to Regulate Radio Communication," which was the first general law on the subject. It was repealed by the Radio Act of 1927. The radio system of the United States grew up and regulatory practices were established under its provisions, and it several times received judicial construction. The deficiencies which became apparent when the courts were called

^{1 36} Stat. 629.

² 37 Stat. 199.

³⁶ Stat. 630.

^{4 37} Stat. 302.

upon to determine its effect were the chief cause for the enactment of the general law of 1927. Many of its features are carried into the new law. For these reasons, aside from the mere historical interest, it merits discussion.

When this act was passed, the practical application of radio was almost entirely confined to marine use—communications by ships with one another and with the shore. Transoceanic communication was almost unknown. Radio telephony had not been developed, and broadcasting was still an undiscovered art. The law was drawn to meet conditions as they then existed and problems as then known. Its purpose was expressed as follows by the committee which reported the bill to the Senate:

Radio communication has already demonstrated its value as an agency for promoting the security of life and property at sea, and under proper supervision and regulation that value can be greatly increased. The most important purpose of this bill is to regulate that agency so as to attain that end so far as the committee by past experience has been able to judge situations which have arisen and provide for situations which may arise calling for its use.

The 1912 law was doubtless influenced by other marine legislation. Probably its administration was paced in the Department of Commerce because of the duties imposed on that department in the enforcement of the navigation laws under prior acts. It may be, too, that the idea of licensing stations was adopted from the provisions of the navigation laws requiring the licensing of vessels, although the British had already inaugurated that system. It was a novel plan as applied to commerce by land. The provisions imposing forfeiture of apparatus unlawfully used likewise follow the navigation laws. The committee which reported the bill to the House said that "the licensing system proposed is substantially the same as that in use for documenting upward of 25,000 merchant vessels."

Something of the opinion as to the value of radio at that time may be gathered from the testimony of a high naval officer before the House Committee, who said:

¹ Senate Report 698, Sixty-second Congress, second session, p. 5.

Generally speaking, however, the department believes that wireless communication should be limited as far as possible, to its legitimate field; that is, communication between the shore and vessels at sea.

Scope of Act.

Although the situation which prompted the enactment of the law was that existing in the marine services, Congress had in mind conditions as a whole, and the language used in the act was broad enough to include all forms of radio communication.

Section 1 required the obtaining of a Federal license before engaging in any form of interstate or foreign communication by radio, at any place within the jurisdiction of the United States, except the Philippine Islands. The license was to be granted by the Secretary of Commerce. The effect of the provision was that except under and in accordance with such a license, no person might use or operate any apparatus for radio communication:

- 1. As a means of commercial intercourse (a) between the several states, (b) with foreign nations, and (c) upon any vessel of the United States engaged in interstate or foreign commerce.
- 2. For the transmission of radiograms or signals, the effect of which extended beyond the jurisdiction of the state or territory in which the same were made.
- 3. Where interference would be caused thereby with the receipt of messages or signals from beyond the jurisdiction of the said state or territory.

Ship Stations.

The requirement of licenses for ship stations was in accordance with Article IX of the London Convention.

Application to Broadcasting.

It was argued that, under this section, no license was required for broadcasting, the contention being that it was not "commercial intercourse" because generally con-

¹ The licensing feature is maintained in the 1927 law.

² Section 10.

This feature is carried into the 1927 law

ducted without compensation, and furthermore, that being unknown when the law was adopted, its inclusion could not have been contemplated.¹

That broadcasting did fall within the act was, moreover, definitely settled by the provision that a license must be obtained "for the transmission of radiograms or signals the effect of which extends beyond the jurisdiction of the state or territory in which the same are made." The word "commercial" does not appear. The clause flatly prohibited any form of interstate radio transmission except under license, and clearly included broadcasting.

While radio telephony, of which broadcasting is only one phase, was not in actual use in 1912, the only transmission being by telegraph, it had already entered the state of experimentation and the probability of practical development was in the minds of the legislators. Section 6 of the act recognized it by providing that the term "radio communication" should include any "system of electrical communication by telegraph or telephony."

In its report upon the bill, the Senate Committee said:3

The term "radio communication" instead of "radio telegraphy" is used throughout the bill so that its provisions will cover the possibility of the commercial development of radio telephony (Sec. 6, p. 14). Experiments have been made here and abroad for some years in carrying the human voice on hertzian waves, but with only limited and occasional results. Radio telephony involves the application of the same principles as are involved in inventions to enable apparatus to select and record accurately one message on a given wavelength out of a mass of messages on various lengths. When this latter result has been attained—an unfulfilled promise of some years' standing—radio telephony will quickly follow. The bill is framed to be adjustable to that improvement when it comes, but in the meantime it deals with the art as it exists today.

¹ The commercial features of broadcasting as at present conducted have already been discussed (see p. 35). The words "commerce" as used in the Constitution and "commercial intercourse" are synonymous. Gibbons v. Ogden, 9 Wheat. 1, 188; Passenger Cases, 7 How. 283, 401; United States v. Holliday, 3 Wall. 407, 417; Lottery Cases, 188 U. S. 321, 346; United States v. Scott, 148 Fed. 431, 434.

² Cited in Carmichael v. Anderson, 14 Fed. (2d) 166.

Senate Report 698, Sixty-second Congress, second session, p. 7.

Upon this question, the Attorney General said:

While the Act of 1912 was originally drafted to apply primarily to wireless telegraphy, its language is broad enough to cover wireless telephony as well, and this was clearly the intention of its framers.

Discretionary Power in Issuing Licenses.

Soon after the passage of the act, the question was raised as to whether the Secretary of Commerce could exercise any discretion in the issuing of the licenses, or whether he was under the mandatory duty of granting them to all applicants.

The Committee on Merchant Marine and Fisheries in its report to the House said:

The first section of the bill defines its scope within the commerce clause of the Constitution, and requires all wireless stations, ship and shore, public and private, to be licensed by the Secretary of Commerce and Labor. This section does not give the head of that department discretionary power over the issue of the licenses, but in fact provides for an enumeration of the wireless stations of the United States and on vessels under the American flag. The license system proposed is substantially the same as that in use for the documenting of upward of 25,000 merchant vessels.

The question first arose as the result of an application for a license for transatlantic telegraph communication for a station at Sayville, Long Island. The corporation applying was organized under the laws of the state of New York, but the Secretary of Commerce and Labor had reason to believe that it was in fact controlled by German capital. Germany did not permit similar American-owned corporations to operate in that country. The Secretary of Commerce and Labor submitted to the Attorney General the question whether he had authority to refuse to license the station on this ground.

The Attorney General replied in the negative, calling attention to the Committee report quoted above, and to other Congressional proceedings, saying:

¹ 29 Opp. Atty. Gen. 579.

It is manifest that when Congress said that "a person, company, or corporation within the jurisdiction of the United States shall not use or operate any apparatus for radio communication . . . except under and in accordance with a license, revocable for cause, in that behalf granted by the Secretary of Commerce and Labor upon application therefor," it did not intend to repose any discretion in the Secretary as to the granting of the license, if the application came within the class to whom licenses were authorized to be issued."

The subject was next discussed in the case of Intercity Radio Company v. Hoover.\(^1\) The applicant had been operating a telegraph station in New York City with a type of apparatus which, it was asserted, caused serious interference with other communications. The Secretary refused to grant a new license. The company commenced mandamus proceedings to require him to do so, asserting that the duty of issuing the license was purely ministerial. The Secretary answered, contending that the granting of the license would result in interference with government and private stations and that the granting or refusing of the license was discretionary. The extent of the authority of the Secretary was therefore squarely presented. The court held that:

Under a proper interpretation of the Act of Congress approved August 13, 1912, the respondent has no discretion or right to withold from the petitioner a license to operate its apparatus for radio communication.

An appeal was taken from this decision to the Court of Appeals of the District of Columbia,² which affirmed the judgment, holding that Congress intended fully to "regulate the business of radio telegraphy without leaving it to the discretion of an executive officer."

A writ of error to the Supreme Court of the United States was allowed, but before the case was reached in that court it became moot because of the abandonment and dismantling of the station and for that reason was dismissed.³

¹Supreme Court District of Columbia, November 23, 1921, not reported.

Hoover v. Intercity Radio Company, 286 Fed. 1003.

¹ 266 U. S. 636.

The latest expression on the subject is found in Carmichael v. Anderson, involving a controversy between two stations licensed to use the same wavelength, in which the court said:

The Secretary of Commerce had the right, and it was probably his imperative duty, to grant licenses to other operators in the same class, with the right to operate at the same time.

Right to Assign Wavelengths, Divide Time, Etc.

Next in importance to authority to refuse an application for license, or perhaps of equal practical importance as a matter of regulation, was the question of the right of the Secretary to assign wavelengths, specify hours of operation, and limit the power of stations.

The very fundamental of government regulation of radio communication is the assignment to each station of a wavelength or frequency band and compelling it to operate upon that and no other. In no other way can interference, congestion, and confusion be prevented, and although some other powers may be convenient to complete regulation, wavelength assignment is absolutely essential so long as the number of stations continues to exceed the number of available channels. It must be remembered, however, that this situation did not exist in 1912 when the act under consideration was passed, nor was there any reason to anticipate the future necessity for such regulatory measures.

The chief source of doubt was the indefiniteness of the language of Section 2 of the act. It provided that:

Every such license . . . shall specify . . . particulars . . . to enable its range to be estimated . . . shall state the wavelength or the wavelengths authorized for use by the station for the prevention of interference, and the hours for which the station is licensed to work.

Neither in Section 2 nor elsewhere in the act was express authority given the Secretary to exercise these powers, although an affirmative delegation would be the obvious method of conferring the authority if Congress had intended

¹ 14 Fed. (2d series) 166, 167.

to do so. Section 2 merely provided that the license must on its face set out the wavelength authorized and the other pertinent information. The argument was made that since the license must contain these conditions, and since the Secretary issued the license, he necessarily must determine these features before he could insert them, and therefore had implied power to do so. The contrary view was that the law itself made the determination for the different classes of stations, and there was therefore no necessity for the exercise of any discretion by the Secretary, and that he was merely to determine the class of the station, the provisions of the act applicable to such class, and make the corresponding recital in the license.

It was further argued that although the section referred to the wavelength "authorized for use by the station," this did not mean authorized by the Secretary, since the law itself contained the authorization, and action by the Secretary was superfluous.

At the time of the passage of the act, there were three known classes of radio stations:

- 1. Government stations, which were excluded from the law.
- 2. Ship stations and shore stations engaged in commercial communication.
- 3. Amateur stations, referred to in the act as private stations "not engaged in the transaction of bona fide commercial business" (Sec. 4, 15).

For the purpose of preventing interference between them, the law authorized the use of wavelengths for these classes as follows:

- 1. Government stations: 600 to 1,600 meters was reserved for them by excluding all others.
- 2. Ship to shore stations: 300 meters; 600 meters (Reg. 1), "other sending wavelengths" (Reg. 2).
 - 3. Amateurs: any wavelengths below 200 meters.
- ¹ While under Regulation 1 stations were to designate their normal sending and receiving waves, coastal stations must select either 300 or 600 meters, and 300 is the normal wave for ships, under Art. Ill of the Regulations of the London Convention, agreed to but not ratified by the United States when the act was passed.

It will be observed that the law neither made nor authorized any distribution of wavelengths among the individual stations composing the various classes. It contented itself with interclass allocation.

The Secretary was authorized to specify or state the wavelength, but Section 2 expressly provided that the license should be "subject to the regulations contained herein." The second regulation provided in effect that the station might use "other sending wavelengths" than those designated by it under the first regulation, and this regulation was as much a part of the act and had the same effect as any other provision.

Under this view, it followed that since the act itself authorized the wavelengths to be used, there was no necessity for a discretionary power in the Secretary in assigning them.

For some years after the passage of the act, radio communication in the United States presented no regulatory problems. Though marine and amateur use was extensive, channels were available for all. But when broadcasting was inaugurated in 1921, and applications for licenses were made, new conditions arose not contemplated by law or treaty. There was no provision for wavelengths for this service, yet it obviously required channels on which to operate, so selected as not to interfere with or be subject to interference from other services. The Secretary of Commerce therefore selected 360, and later 400 meters, as being suitable for this service, and all broadcasting stations were licensed upon these channels.

There was still no attempt to assign a separate channel to each station. The wavelengths were assigned to all in the group, precisely as in the case of the ships and amateurs where the group allocation was made by law. Faced with a situation created after the passage of the 1912 law, not anticipated when that law was passed, the Secretary adopted the principles of the act and applied them to the new communication method.

Broadcasting grew so rapidly that this simple policy became wholly unsuitable. By 1923, there were several hundred stations trying to operate simultaneously on the two wavelengths assigned for joint use. Interference and conflict between them necessarily resulted. No station could give undisturbed service. Its communications were mixed with those of its neighbors and the confused result was worthless to both.

The decision of the Court of Appeals in Hoover v. Intercity Radio Company, already referred to, was rendered in February, 1923. The court passed definitely upon wavelength assignments. While it decided, as already stated, that the Secretary had no right to refuse to license an applicant, it held at the same time that there was discretionary authority in the assignment of a wavelength for the station's use, and that while the Secretary was compelled to assign some wavelength, the selection of a particular one rested in his judgment. Upon this subject, the court said:

In the present case the duty of naming a wavelength is mandatory upon the Secretary. The only discretionary act is in selecting a wavelength, within the limitations prescribed in the statute, which, in his judgment, will result in the least possible interference. The issuing of a license is not dependent upon the fixing of a wavelength. It is a restriction entering into the license. The wavelength named by the Secretary merely measures the extent of the privilege granted to the licensee.

This decision had a profound effect upon the practice and methods of radio broadcasting. It was rendered in February, 1923. In March, 1923, at the call of Secretary Hoover, a conference of the various radio interests met in Washington to determine the steps to be taken to obviate the difficulties which then threatened the value of all broadcasting. The conference recommended the abandonment of the policy of group allocation in broadcasting and the inauguration of a plan by which a separate channel would be assigned to each station, so that, in theory at least, each should have its own operating channel from

which its neighbors would be excluded and on which it could carry on its communications freely and without interruption or interference. The plan was adopted, and the Secretary of Commerce, following the decision of the Court of Appeals upholding his authority to do so, proceeded to allocate a wavelength to each broadcasting station and to stipulate it in the license. This procedure continued for several years. The broadcasting system of the United States was erected under it.

The decision of the Court of Appeals was accepted as a correct statement of the law, and indeed was the only judicial interpretation of it until 1926, when further litigation arose. A broadcasting station in Chicago had been assigned a certain wavelength, which was set out in its license, and its time of operation was limited to specified hours, one night a week. Its owner became dissatisfied with the license conditions and proceeded to operate upon a wavelength and at times other than stated in the license. Proceedings were then commenced by the United States to enforce the penalty provided in Section 1 of the act for operation in violation of that section. There was no dispute as to facts, the court stating in its opinion that it was agreed that the defendant "on the dates charged in the information, operated its station on a wavelength and at times which were not authorized."1

The opinion characterized the provisions of Sections 1 and 2 of the act as "general, indefinite, and ambiguous." It adopted the theory that the regulations which Congress itself inserted in Section 4 of the act were considered sufficient, that the Secretary was required to issue the license subject only to those regulations, and that Congress withheld from him the power to prescribe additional regulations. The court pointed out a lack of any prescribed legislative standard in accordance with which discretion on the part of the Secretary might be exercised, and intimated that power exercised in the absence of standard is

¹ United States v. Zenith Radio Corporation, 12 Fed. (2d series) 614.

arbitrary, rather than discretionary, and that if so construed the law might be unconstitutional, saying that "Congress cannot delegate its power to make a law, but it can make a law to delegate a power to determine some fact or state of facts upon which the law makes or intends to make its own action depend." The Court concluded that "under the rules applicable to criminal statutes, Sections 1 and 2 cannot be construed to cover the acts of the defendant upon which this prosecution is based."

The court made no reference to the earlier decision in the District of Columbia, although its conclusion is diametrically opposed to the opinion in that case.

A slight departure from the rule above set out is found in the case of Carmichael v. Anderson.¹ The parties were owners of broadcasting stations in Missouri, one in Jefferson City and the other in Independence. Each was licensed and each had been assigned the same wavelength. The court states that "as a condition precedent to the granting of a license to plaintiff for the operation of his broadcasting station, the Secretary of Commerce required a schedule of hours to be agreed upon between the plaintiff and the state marketing commissioner² and filed." An agreement on time division was made, and the controversy arose over an attempt by one station owner to enforce it as against the other who proposed to disregard it and to operate full time. In passing upon the question of Federal jurisdiction of the controversy, the court said:

The statute provides for the operation of said stations "under and in accordance with a license revocable for cause." While by Section 10101, U. S. Compiled Statutes, the Secretary of Commerce may be without power to impose restrictions other than those contained in the legislative act, yet he would undoubtedly have the right to grant his licenses with such restrictions as the parties interested might agree upon. Any controversy arising under such an arrangement would invoke an interpretation of the congressional act, and would become a matter of Federal judicial cognizance."

^{1 14} Fed. (2d series) 166.

² Operator of the other station.

The correctness of this ruling seems at least doubtful. The authority of the Secretary of Commerce could come only from an Act of Congress. The language of the court that the Secretary "may be without power to impose restrictions other than those contained in the legislative act" was, except for the use of the subjunctive, in accord with the earlier decision. The addition that "he would undoubtedly have the right to grant his licenses with such restrictions as the parties interested might agree upon" was equivalent to saving that private individuals might confer upon the Secretary authority which he did not have by law. The true rule would seem to be that the Secretary either did or did not have the right to impose conditions. depending upon the correct construction of the statute, but that his power could not be increased or diminished by the wishes of any individuals or by what they might request him to do or agree that he should do. The law itself created, defined, and limited his authority. The agreement between the parties received no additional force from being included or recited in the license.

The conflict between the decisions in the Intercity and Zenith cases left the Secretary of Commerce without judicial guidance. The Illinois opinion, while not expressly criticizing the decision in the District of Columbia, nevertheless was sufficient to cause grave doubt as to the advisability of continuing to rely upon it as a correct construction of the law. The entire question was therefore referred to the Attorney General of the United States, who was requested to advise the Secretary of Commerce as to his duties and powers under the act.

Under date of July 8, 1926, the Attorney General stated his conclusions. He referred to the court decisions, without discussing them, and virtually adopted the conclusions of the United States District Court in the Zenith Case. The decision in Carmichael v. Anderson had not then been rendered. He reasoned that Congress itself provided on the face of the act whatever regulations it thought neces-

sary and delegated no power to add to them. Upon the question of assignment of wavelengths, division of time, and limitation of power, after citing the regulatory features of Section 4, he held that Regulations 1 and 2 of Section 4 of the act constituted a "direct legislative regulation of the use of wavelengths" and "preclude the possibility of administrative discretion in the same field." He also held that the Secretary had "no general authority to fix the times at which broadcasting stations may operate" or to insert in the license any limitation as to the amount of energy to be used in carrying out the desired communications.

This construction of the statute was adopted by Judge Wilson, of the Circuit Court of Cook County, Illinois, who said:¹

On July 8, 1926, Acting Attorney General Donovan rendered an opinion for the Department of Justice in Washington which, in effect, advised the Department of Commerce that, from his construction of the act, broadcasting stations coming within the prescribed band could not be regulated except for the purpose of designating normal wavelengths under Regulation 1, and that the act conferred no general authority to fix hours of operation or to limit power; that any station might with impunity operate at hours and with powers other than those fixed in its license, subject only to Regulations 12 and 13, and to the penalties against malicious interference contained in Section 5. While this opinion is not a judicial interpretation of the act, it would appear to this court that it is a correct interpretation, and, if true, there is nothing contained in the Act of Congress of August 13, 1912, that would provide against such use of wavelengths, except as contained in said enactment and as so interpreted.

Following this opinion, the Secretary ceased to assign wavelengths. Licenses issued thereafter merely recited on their face the wavelength designated by the applicant under the first regulation of Section 4. Stations were free to use whatever wavelengths they chose.

This situation resulted in increasing conflict and confusion. Interference between stations became common,

1 The Tribune Company v. Oak Leaves Broadcasting Station, Inc., not reported.

causing disturbances both to the broadcasters and to the listeners.

Operators' Licenses.

Section 3 of the act required that the communication apparatus must at all times when in use be in the charge or under the supervision of a person licensed for that purpose by the Secretary of Commerce. As to stations on shipboard, this provision accorded with the international requirements of the London Convention. But the imposing of a license requirement on operators of all stations on land introduced an entirely new feature into Federal regulation of commerce. Other occupations affecting the conduct of interstate commerce, as a rule, have no such requirements, aviation, 2 however, being another exception. Operators in the service of the wire telegraph, telephone, and cable companies need no Federal permission to engage in their calling, though their duties are precisely similar to those of the radio operators. It may be said that a higher degree of skill is necessary in radio and personnel should be more carefully selected, because unskilled operation might imperil life, through neglect of or interference with distress signals. But there are other occupations, negligence in which is much more dangerous to life, the railroad engineer for instance, with which the Federal government does not interfere. Under the provision of the act, however, a license was required for the operator of every station engaged in radio communication, including broadcasting.

Regulations.

The regulations prescribed by Congress were contained in Section 4 of the act. They contained somewhat detailed provisions as to station operation, intended to keep down interference. Most of them were rendered obsolete by

¹ Regulations of London Convention, Art. X.

² 44 Stat., 568.

advance in technical methods, and some were disregarded entirely in practice.

The first regulation, for instance, prohibited licensed stations from using any wavelength between 600 and 1,600 meters, this band being reserved for government use in both the Berlin and London conventions. This restriction would have caused serious inconvenience but for the authority given to the Secretary of Commerce to "waive the provisions of any or all these regulations when no interference of the character above mentioned can ensue."

Assuming that action by the Secretary contrary to the terms of the regulations constituted a "waiver" of them, there was a partial waiver as to the first and second regulations in that ship stations were authorized to use wavelengths of 706 and 715 meters, and shore stations were absolved from the requirements of being prepared to use 300 meters. Both modifications were induced by the creation of the broadcasting band consisting of the wavelengths from 200 to 545 meters, and the desire to prevent other classes of stations from interfering with it. The power to "waive" was not exercised as to any other regulations.

Secrecy of Messages.

The nineteenth regulation prohibited the divulging or publishing of any message "except to the person or persons to whom the same may be directed" or to a forwarding station. It was generally considered that the section did not apply to broadcast programs, which have no addresses, and whose purpose is publicity rather than secrecy.

Duration of License.

The 1912 Act did not fix the license period. On the face of the act, the license was indeterminate, "revocable for cause," and apparently continued in force until revoked. No procedure for revocation was provided, nor

¹ See pp. 178 and 179.

³ Section 1, 37 Stat. 302.

was there any definition of the word "cause." Presumably, the only sufficient cause would be a violation of the terms of the act. The question never arose.

In practice, the Secretary of Commerce issued all licenses for limited periods—2 years for ship stations and amateurs, 1 year for point-to-point telegraph, and 90 days for broadcasting. Each license contained such an expiration period, generally being renewed, or a new license issued, at the end of the term. If it be true that the Act of 1912 was complete in itself and that no administrative officer had power to add to or modify its language, it follows that the licenses so issued were without authority in this respect, and should have been indeterminate as to expiration.

In the opinion already cited, the Attorney General said there was no authority in the act for the issuance of licenses of limited duration.

Control of Stations in War Time.

By Section 2, the President, in time of war or public peril or disaster, was authorized to cause the closing of any station and the removal of its apparatus, or to authorize any department of the government to control or use any station or apparatus, upon payment of just compensation to the owner.

Executive Order 2011, dated August 5, 1914, referred to previous declarations of the neutrality of the United States and proclaimed:

All radio stations within the jurisdiction of the United States of America are hereby prohibited from transmitting or receiving for delivery messages of an unneutral nature, and from in any way rendering to any one of the belligerents any unneutral service, during the continuance of hostilities.

On September 5, 1914, the President issued Executive Order 2042. It provided the following:

One or more of the high-powered stations . . . capable of transatlantic communication shall be taken over by the government and used or controlled by it to the exclusion of any other control or use, for the purpose of carrying on communications with land stations in Europe, including code and cipher messages.

The Secretary of Navy was required to carry out both orders.

After the entry of the United States into the war, it was ordered that all radio stations required for naval communication should be taken over, and authority was given to close all stations not necessary for such communications and to remove all apparatus therein. The Secretary of Navy was required to give effect to these provisions.

The Attorney General affirmed the right of the President to issue the above orders² and, among other things said:

The act of August 13, 1912 (37 Stat. 302), known as the Radio Act, provides additional authority for the use or control of any radio station by any department of the government in time of war, or public peril, or disaster.

It is unnecessary to comment on the perils of the present international situation, and it is easy to see that an agency such as the wireless stations along our coast is capable of creating international complications of the gravest character. Their use is novel; their possibilities are extraordinary; and the ease with which belligerents can be instantly notified of the movement of vessels and given other important information is perfectly apparent.

In case it becomes inadvisable for any reason to continue the censcrship, I do not hesitate, in view of the extraordinary conditions existing, to advise that the President, through the Secretary of the Navy or any appropriate department, close down or take charge of and operate the plant in question, should he deem it necessary in securing obedience to his proclamation of neutrality.

After the termination of the war, the President, by Executive Order 3228, dated February 13, 1920, ordered the return of all stations to their owners.

During the war, the United States took over the Sayville, Long Island, wireless station of the German company, which was later disposed of by the Alien Property Custodian.

¹ Executive Orders 2585 and 2605A.

² 30 Ops. Atty. Gen. 291.

Censorship.

The law did not itself regulate nor authorize anyone to regulate the character of matter sent out by radio. Communication was uncensored. The only restrictive provision was in Section 7 of the act, prohibiting the transmission of any "false or fraudulent distress signal or call or false or fraudulent signal, call, or other radiogram of any kind." The meaning of "false or fraudulent" signals or radiograms was not defined and has received no construction.

Effect of 1912 Act on State Power.

It has been held that Congress did not intend by the 1912 law to preempt the field of radio regulation to the exclusion of state authority or the impairment of certain civil rights. The court said:

The license issued by the Department of Commerce and Labor does not constitute a right which can be used in violation of private rights, nor under equitable principles, would it have the effect of granting a right to a person superior to one who had previously acquired rights or interests by reason of use. The rights of private individuals to private civil remedies, in spite of the passage of criminal statutes by the Federal government, is best exemplified in the line of cases known as the Texas fever cases, where it has been held from the enactment of Congress it must clearly appear that Congress had intended to take over the entire field of interstate commerce to the exclusion of state law on that particular subject and this must be so clear that it would be apparent that there would be a direct conflict between Federal legislation and state laws.

This court is of the opinion, from its interpretation of the Act of August 13, 1912, that Congress did not intend to undertake to assume the right to regulate broadcasting under its powers given it to regulate commerce and that, until such time as it does, litigants may enforce such rights as they may have by reason of operating broadcasting stations in the state courts having jurisdiction of the person of the parties.

1912 Law Ineffective.

From the foregoing discussion, it is apparent that the 1912 Act was wholly ineffective as a regulatory law. It

¹ Judge Wilson, The Tribune Company v. Oak Leaves Broadcasting Station, Inc., Circuit Court of Cook County, Illinois, November, 1926, not reported.

was intended obviously as a measure to prevent interference between stations of the various classes existing at the time of its passage, and until the great expansion of the radio communication system, due to the introduction of broadcasting, it served fairly well. But it proved itself of small value in its application to later conditions. The imposition of licenses was of no regulatory effect so long as they were required to be issued to every applicant and there was no authority to limit their number or distribute operating channels among them. The licensing system became a mere method of registration, allowing the government to know who were operating stations and where they were, but contributing nothing to their orderly conduct.

Jurisdiction of Interstate Commerce Commission.

The first law giving to the Interstate Commerce Commission any regulatory powers over radio communication was the Act of June 18, 1910.¹

Existing law on the subject is found in the Transportation Act of 1920,² which makes the provisions of the act applicable to

. . . common carriers engaged in . . . the transmission of intelligence by wire or wireless from one state or territory of the United States, or the District of Columbia, to any other state or territory of the United States, or the District of Columbia, or from one place in a territory to another place in the same territory, or from any place in the United States through a foreign country to any other place in the United States, or from or to any place in the United States to or from a foreign country, but only in so far as such transportation or transmission takes place within the United States.

Also it is applicable to

... such transmission of intelligence . . . in so far as such transmission takes place within the United States.

But purely intrastate communication is not included.

The term "common carrier" is defined in the act as including "telegraph, telephone, and cable companies

^{1 36} Stat. 544.

³⁴¹ Stat. 456, 474.

operating by wire or wireless" and the term "transmission" includes

. . . the transmission of intelligence through the application of electrical energy or other use of electricity, whether by means of wire, cable, radio apparatus, or other wire or wireless conductors or appliances, and all instrumentalities and facilities for and services in connection with the receipt, forwarding, and delivery of messages, communications, or other intelligence so transmitted, hereinafter also collectively called messages.

The general effect of this act is to subject companies engaged in radio communication to the same rules and regulations as are wire telegraph and telephone companies. The Interstate Commerce Commission is given the same jurisdiction over rates and practices in the one case as in the other. Rates and charges must be just, reasonable, and non-discriminatory, and the Commission is given the power of determination as to whether a given tariff or practice meets these tests.

The radio companies which are engaged in the business of transmitting messages as common carriers for hire, the point-to-point telegraph services, for instance, are plainly within the terms of the act, although the phrase "only so far as such . . . transmission takes place within the United States" introduces a doubtful factor into all international or transoceanic transmission. There has been no ruling upon the meaning or effect of the phrase. /Interstate Commerce Commission has never been called 4 upon to entertain any proceedings whatever regarding radio communication. Its only action has been in the shape of a conference ruling in December, 1912, by which it declared its jurisdiction over wireless messages from a commercial station in the United States to a ship at sea, but disclaimed as to messages between American ships at sea.1

The language of the act, particularly Sections 1 and 3, taken at its face value, seems broad enough to embrace all Interstate Commerce Commission Conference Rulings, published August 1,

1917.

stations engaged in the transmission of intelligence by radio, including broadcasting stations which are furnishing service for hire, even though they do not hold themselves out as willing to serve the public generally and so are not strictly "common carriers."

The possibility that the charge of such stations may be subject to regulations by the Interstate Commerce Commission under the terms of the act has not been passed upon nor has it received discussion.¹

The jurisdiction of the commission is not affected by the 1927 law.

¹ See the Pipe Line Cases, 234 U.S. 548.

CHAPTER V

THE RADIO ACT OF 1927

Conditions When Law Was Enacted.

The opinion of the Attorney General to the effect that the 1912 law did not confer authority upon the Secretary of Commerce to refuse applications for licenses, assign wavelengths, or limit power or time of operation was rendered in July, 1926. On July 1, 528 broadcasting stations were in operation. There was little interference. The breaking down of departmental regulation opened the doors to new stations, and by January 1, 1927, the number had increased to 671. Many stations changed wavelengths and increased power without regard to the effect upon their neighbors. Interference and confusion were inevitable and soon caused popular indignation. Bills to provide for adequate control had been long pending in Congress. Public protests at the disturbance with broadcasting service became pronounced, and Congressional interest intensified.

The Message of the President.

President Coolidge in his message to Congress, December 7, 1926, recommended legislation. He said:

Due to the decisions of the courts, the authority of the department under the law of 1912 has broken down; many more stations have been operating than can be accommodated within the limited number of wavelengths available; further stations are in course of construction; many stations have departed from the scheme of allocation set down by the department, and the whole service of this most important public function has drifted into such chaos as seems likely, if not remedied, to destroy its great value. I most urgently recommend that this legislation should be speedily enacted."

General Features of Act.

The new radio law was approved by the President February 23, 1927. It was doubtless primarily intended to

supply the defects existing in the 1912 law. It is a general act, proposing, as stated in the preamble, "to regulate all forms of interstate and foreign radio transmission and communications within the United States, its territories and possessions" excepting the Canal Zone and the Philippine Islands.

That Congress understood the interference problem caused by the disparity between the number of stations and available channels is evident from the report of the Senate Committee. It said:

If the channels of radio transmission were unlimited in number, the importance of the regulatory body would be greatly lessened, but these channels are limited and restricted in number and the decision as to who shall be permitted to use them and on what terms and for what periods of-time, together with the other questions connected with the situation, requires the exercise of a high order of discretion and most careful application of the principles of equitable treatment to all classes and interests affected.

The act creates a radio commission of five members, / appointed by the President with Senate confirmation. For 1 year, the commission has full authority to license transmitting stations. It determines to whom licenses shall be / issued and fixes the wavelengths, power, and times of operations. Broadcasting licenses may be issued for a term of / not more than 3 years, and other licenses for not to exceed 5 years. After the expiration of the year, the powers of the / commission are transferred to the Secretary of Commerce. Jurisdiction of an appellate nature and authority over certain controversies which may be removed to it are, however, retained by the commission.

Termination of Existing Licenses.

Section 1 of the act automatically terminates all existing licenses.² It does not so provide in terms, but accomplishes

¹ Committee on Interstate Commerce, Sixty-ninth Congress, Report 772, May 6, 1926.

¹ See also Sec. 39.

that result by enacting that no apparatus for radio transmission shall be used or operated except under a license issued under the provisions of the new law. Since the act took effect upon its passage, the operation of apparatus before obtaining a new license is technically unlawful, although Section 40 relieves from statutory penalties for a period of 60 days. At the date of this writing, therefore, radio stations are operating without licenses but are free from prosecution.

It is to be observed that although all stations were operating under licenses authorized by the 1912 act, indeterminate as to time and revocable "for cause," Congress did not declare a "cause" in the law ending them. It terminated them by making further operation under them unlawful.

Finding of Public Convenience Interest or Necessity.

All persons desiring to operate established or contemplated stations must obtain a license before proceeding. The commission grants or denies the application upon its determination as to whether or not "public convenience, interest, or necessity" will be served by the operation of the station.²

This provision enunciates a new principle in radio law. There is but little precedent for its adoption in the regulation of interstate commerce. The Supreme Court of the United States, twice in recent years, has referred to certain great enterprises as "great national public utilities," "affected by a public use of a national character and subject to national regulation," "a business affected with a public national interest," "subject to national regulation" and to their regulation as being "in the exercise of the police powers of the national government." The Transportation

¹ For a somewhat similar situation see Bridge Company v. United States, 105 U. S. 470.

³ Secs. 9, 11.

¹ Stafford v. Wallace, 258 U. S. 495, 516; Chicago Board of Trade v. Olsen, 262 U. S. 1, 41. See also Moore v. New York Cotton Exchange, 296 Fed. 61, 71.

Act of 1920¹ provides that neither an extension nor a new line of railroad shall be constructed until the Interstate Commerce Commission has issued its certificate that the present or future public convenience and necessity require or will require the construction thereof. With these exceptions, the idea of a public utility and of public convenience as a condition for entry into interstate commerce is unique in Federal legislation.

History of "Public Interest" in Broadcasting.

The idea of a public interest in radio communication, with special reference to broadcasting, was first officially expressed in an address made by Secretary Hoover before the Third Annual Radio Conference held in Washington in October, 1924. Up to that time, no one had suggested that broadcasting was anything but a strictly private enterprise of the station owner or that any public element was present in it. Stations were, and still are, built and operated entirely at individual expense. While the purpose was to furnish satisfactory programs to the listening public, in the same sense that a newspaper must furnish desirable reading matter to its readers, there was no duty to do so. The principle that the privilege must be based upon service had not been evolved.

Secretary Hoover in addressing that conference said:

Radio has passed from the field of an adventure to that of a public utility. Nor among the utilities is there one whose activities may yet come more closely to the life of each and every one of our citizens, nor which holds out greater possibilities of future influence, nor which is of more potential public concern. Here is an agency that has reached deep into the family life.

Radio must now be considered as a great agency of public service, and it is from that viewpoint that I hope the difficult problems coming up before this conference will be discussed and solved.

The principle was again and more clearly enunciated by Secretary Hoover in November, 1925, before the Fourth ¹41 Stat., p. 477.

National Radio Conference. This was the largest conference held up to that date, attended by some 600 representatives of all the varied radio interests, including the owners of the stations. On this occasion, he said:

The ether is a public medium, and its use must be for public benefit. The use of a radio channel is justified only if there is public benefit. The dominant element for consideration in the radio field is, and always will be, the great body of the listening public, millions in number, countrywide in distribution. There is no proper line of conflict between the broadcaster and the listener, nor would I attempt to array one against the other. Their interests are mutual, for without the one the other could not exist.

There have been few developments in industrial history to equal the speed and efficiency with which genius and capital have joined to meet radio needs. The great majority of station owners today recognize the burden of service and gladly assume it. Whatever other motive may exist for broadcasting, the pleasing of the listeners is always the primary purpose.

The greatest public interest must be the deciding factor. I presume that few will dissent as to the correctness of this principle, for all will agree that public good must overbalance private desire; but its acceptance leads to important and far-reaching practical effects, as to which there may not be the same unanimity, but from which, nevertheless, there is no logical escape.

There was also presented to the conference a resolution adopted by the National Association of Broadcasters, made up of owners of broadcasting stations, by which it was resolved:

That in any Congressional legislation, or pending such legislation, the test of the broadcasting privilege be based upon the needs of the public served by the proposed station. The basis should be convenience and necessity, combined with fitness and ability to serve, and due consideration should be given to existing stations and the services which they have established.

The conference resolved:

- 1. That public interest as represented by service to the listener shall be the basis for the broadcasting privilege.
 - 2. That authority should exist to limit the number of stations in any community has already been determined by this conference, which has

likewise recommended that benefit to the listener must be the basis for the broadcasting privilege. With these determinations, your committee is of course in hearty accord.

3. That those engaged in radio broadcasting shall not be required to devote their property to public use and their properties are therefore not public utilities in fact or in law; provided, however, that a license or permit to engage in radio communication shall be issued only to those who in the opinion of the Secretary of Commerce will render a benefit to the public; or are necessary in the public interest; or are contributing to the development of the art.

The proceedings of the conference were furnished to both houses of the Sixty-ninth Congress and presumably received consideration in framing the 1927 law.

Meaning of "Public Convenience, Interest, and Necessity."

The act contains no definition of the words "public convenience, interest, and necessity," and their meaning must be sought elsewhere. The phrase has been used in many state statutes with respect to public utilities, such as water, electric, gas, and bus companies. The state laws do not attempt to define it. Indeed, it has been said to be a legislative impossibility to give the words exact definition.1 They comprehend the public welfare and involve a question of fact deducible from a variety of circumstances. They require determination as to reasonable necessity or urgent public need or high importance to the public welfare, but not indispensability of the service.2 and the decision is made from considerations of sound public policy3 after due regard is given to all of the relevant facts affecting the general public as well as the applicant.4 The convenience and necessity of the public as distinguished from that of the individual or any number

¹ State v. Darazzo, 118 Atl. (Conn.) 81.

¹ Wisconsin Telegraph Company v. Railroad Commission, 156 N. W. 614; re Shelton Rail Company, 38 Atl. (Conn.) 362; Wabash C. and W. Company v. Commission, 141 N. E. (Ill.) 212.

¹ Fulton Light Heat and Power Company v. Seneca R. P. Company, 205 N. Y. Supp. 821.

⁴ Re Alabama Power Company, P. U. R. 1923 E. (Ala.) 828, 832.

of individuals is the test. The desire of the applicant is not the influencing factor.

Under the court and commission rulings in the state cases, where there are two applicants for the same privileges, it is for the commission to determine whether the privileges shall be granted to both or only to one, and if only to one, then which one, and in choosing between them, the commission may take into consideration their financial ability, operating experience, and other facts of equal relevancy.⁸

Some light is thrown on this provision by the decision of the Supreme Court' involving the section of the Federal statute requiring a certificate of convenience for authority to abandon a part of a railroad. The court said:

The certificate issues, not primarily to protect the railroad, but to protect interstate commerce from undue burdens or discrimination. The commission by its order removes an obstruction which would otherwise prevent the railroad from performing its Federal duty. Prejudice to interstate commerce may be effected in many ways.

The making of this determination involves an exercise of judgment upon the facts of the particular case. The authority to find the facts and to exercise thercon the judgment whether abandonment is consistent with public convenience and necessity, Congress conferred upon the commission . . . The sole test prescribed is that abandonment be consistent with public necessity and convenience. In determining whether it is, the commission must have regard to the needs of both intrastate and interstate commerce. For it was a purpose of Transportation Act of 1920 to establish and maintain adequate service for both.

The benefit to one of the abandonment must be weighed against

the inconvenience and loss to which the other will thereby be subjected. Conversely, the benefits to particular communities and commerce of

1 State Public Utilities Commission ex rel., etc., v. Toledo, Etc. Company, 286

^{1.} S82, 122 N. E. 158.

1 Wabash C. & W. R. Co. v. Commerce Commission, 141 N. E. (Ill.) 212;

re Application to Operate Jilneys, P. U. R. 1922 E 612; re Pacific States Express, P. U. R. 1922 D, 291.

Re Austin Brothers Transit Company, P. U. R. 1923, C 219; re C. A. Schlageter, P. U. R. 1923, D. 158; re Chicago Motor Bus Company, P. U. R. 1918, C 320; Modesto v. Conn. Company, 117 Atl. 494.

⁴ Colorado v. United States, 271 U.S. 153, 162, 163, 166, 168.

continued operation must be weighed against the burden thereby imposed upon other commerce. Compare Proposed Abandonment by Boston & Maine R. R., 105 I. C. C. 13, 16. The result of this weighing—the judgment of the commission—is expressed by its order granting or denying the certificate.

Effect of New Provision.

The adoption of this principle in the 1927 law means a revolution in practice, at least as to broadcasting. Licenses are no longer to be had for the asking. The applicant must pass the test of public interest. His wish is not the deciding factor. The system contains elements of danger, for while it accords with modern public utility principles in the granting of the privilege, it omits the provisions for governmental supervision and regulation to guarantee public service, which limit the grants in other cases.

Meaning as Applied to Radio Conditions.

The significance of the words as applied to the radio situation is somewhat indefinite, but no more so than when used in state statutes and applied to public utilities. They may have varied effects as between different forms of radio communication because of the difference in conditions and in relationship to the public. In commercial point-to-point service, for instance, whether it be domestic or international, the meaning is probably the same as in state statutes affecting telegraphs and telephones. In such cases, the dominating factor is the effect upon that portion of the public which patronizes the utility, and that is really the prime consideration in all instances.

Assuming that the public interest, when used in connection with broadcasting licenses, means the interest of the listeners, the practical application of the standard in the absence of commission rulings remains difficult. It is possible, nevertheless, to point out some of the features which may properly receive consideration.

Just as state public service commissions appraise the facilities of an applicant for a given service, the radio com-

mission in reaching its decision may look to the construction, equipment, and methods of operation of the station applied for, since upon them largely depend the quality of its transmission, the clarity of its messages, the intelligibility of its communications.

The power of the proposed station is of importance from the viewpoint of quality of transmission, continuity of service at all hours and at all seasons, the extent of its service area, and, on the other hand, the extent of its effects by way of interference.

The character of the programs furnished is an essential factor in the determination of public interest but a most difficult test to apply, for to classify on this basis is to verge, on censorship. Consideration of programs involves questions of taste, for which standards are impossible. It necessitates the determination of the relative importance of the broadcasting of religion, instruction, news, market reports, entertainment, and a dozen other subjects. It may require the determination of preferences as between stations devoted to service of the public generally and those servicing only special groups, however important. But in spite of the troublesomeness, these very features may be the controlling considerations in commission decision.

In the administration of the public utility laws of the states, it has been held that the provision as to public convenience is not to be used simply to oust or destroy an existing utility by admitting another. The standard abandons the once-prevalent belief that service is stifled by monopoly and bettered by competition. It recognizes that undue competition may be wasteful, unscientific, and uneconomic, and may result in general loss to both the public and the utility. Plainly, therefore, it is not in the public interest to destroy an existing station merely to admit a new one. The basic principle of modern public utility law, and the reason for the requirement of certificates of public convenience and necessity in advance of construction or opera-

¹ Re Himberg, P. U. R. 1922, C 420, 422.

tion, is the prevention of ruinous competition reacting to final public detriment. That principle seems applicable to the radio situation, and may become a decisive factor if service features are on an equality. Weight may be given to the priority position of established stations as defined in the decision of the Illinois Court in *The Tribune Company v. Oak Leaves Broadcasting Company, Inc.*, though, of course, that decision is not authority for any claim of right as against the United States or for the assertion of any limitation upon the power of the commission.

Waiver of Rights.

In addition to bringing himself within the standard of public convenience, interest, and necessity, the applicant for a station license must execute the waiver required by Section 5 of the act, which provides for "a waiver of any claim to the use of any particular frequency or wavelength or of the ether as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise."

The history of this provision is of interest. It finds its origin in a bill which passed the Senate April 7, 1924. It provided that:

The ether and the use thereof for the transmission of signals, words, energy, and other purposes, within the territorial jurisdiction of the United States, is hereby reaffirmed to be the inalienable possession of the people of the United States and their government, but temporary privileges to enjoy such use may be granted as provided by law for terms of not to exceed 2 years.

No such license shall be renewed or any additional license granted, except upon the filing with the Secretary of Commerce of an application by such licensee or applicant, executed under oath, setting forth in the form prescribed by the Secretary of Commerce that the claims of such licensee or applicant to the use of the ether are in consonance with and limited to the recitations and provisions of this act.

On July 3, 1926, there was introduced in the Senate Joint Resolution 125, which provided that no license or renewal should be granted

¹ Congressional Record, Sixty-eighth Congress, p. 5737.

. . . unless the applicant therefor shall execute in writing a waiver of any right or of any claim to any right, as against the United States, to any wavelength or to the use of the ether in radio transmission because of previous license to use the same or because of the use thereof.

The resolution passed both Senate and House on the day of its introduction, that being the last day of the session. It was signed by the President and became a law December 8, 1926. Its life, however, was short, as it was specifically repealed by Section 39 of the Radio Act.

The resolution varied from the former Senate provision in limiting the waiver to any claim of right "as against the United States," thus leaving unaffected any rights which might exist on the part of one station owner against another.

There resulted considerable disagreement as to the meaning of the resolution. Taking the language literally. it was argued that it was no more possible to acquire rights to wavelengths or to the ether than to the nebular hypothesis, so that on its face the resolution was utterly meaningless. But taking the words in their popular meaning, the result of the waiver might be a surrender of any right to operate the apparatus at all, which was equivalent to consent to its confiscation. Construed in a more limited sense, the waiver was confined to the abandonment of a claim to a particular wavelength merely because apparatus had been so adjusted as to utilize it. It was probably in the desire to clear up this uncertainty that the resolution was repealed and the new language of Section 5 substituted. by which the waiver is limited to an abandonment of any claim to the use of a "particular" wavelength, or of the ether, as against the regulatory power of the United States.1 As the power of the Federal government is supreme over interstate and foreign commerce, it is difficult to conceive how mere use of a particular wavelength could create any right as against the regulatory power of the United States and the probability is that the execution of the waiver

¹ For debate on this subject, see Congressional Records, February 3, 5, and 7, 1927.

neither adds anything to Federal power nor impairs in the slightest degree any rights of the station owner.

In any event, the waiver would hardly be construed as a surrender of any constitutional rights. It is not to be supposed that Congress intended to require abandonment of constitutional guarantees as a condition precedent to the obtaining of a license. The states have in a few instances attempted to do so, but such legislation has met with uniform condemnation. The Supreme Court has said that it is inconceivable that constitutional guarantees may thus be manipulated out of existence and added that constitutional powers may not be used by way of conditions in order to obtain an unconstitutional result. The cases are reviewed and the principles restated in a late case. There would seem no reason why the limitations thus declared upon state legislation should not be equally applicable to Acts of Congress.

Constitutional Rights of Station Owners.

The effect of the 1927 law in terminating existing licenses and requiring the obtaining of new ones is to deprive the station owner of his right to operate his apparatus, whatever that may be, unless he executes the required waiver and is then able to bring himself within the rule of "public convenience, interest, and necessity."

It may be assumed that the requirement of a license, taken by itself, is a legitimate step in the regulation of commerce, and therefore within the constitutional power of Congress.² If the commission, however, should refuse to issue a license to the owner of apparatus constructed and operating prior to the passage of the law, the question of the constitutional rights of the owner may easily arise. The owner may contend either that he is deprived of his property without due process of law, or that his property is taken for public use without just compensation, in either

¹ Frost and Frost Trucking Company v. Railroad Company, 271 U. S. 583, 594

²See Colorado v. United States, 271 U. S. 153.

case in violation of the Fifth Amendment to the Federal Constitution.

In advance of knowledge of the attitude of the commission and of what action it may take, it is impossible to enter upon an elaborate discussion of the constitutionality of the law in these respects. All that can be done is to indicate the lines which such discussion may take and to refer to a few outstanding decisions which seem relevant to the principles which underlie determination.

Report of Committee American Bar Association.

A committee of the American Bar Association made an interim report on radio legislation in December, 1926. It discussed the bills then pending in Congress, with particular reference to the constitutionality of refusing licenses to existing stations without affording compensation. It urged the inclusion of provisions which would compensate the owners of stations so closed, the money necessary to be derived from a tax on those licensed. In support of that suggestion, the committee said:

It seems to be the consensus of opinion that to bring about a situation where interference will not be possible, several hundred stations now existing will have to be closed if the remaining stations are to operate on full time and if power is to be increased so as to bring about the best conditions for reception. To close stations in which large sums of money have already been invested is obviously a drastic provision. We do not believe that the courts would uphold as constitutional legislation which permitted such closing either directly or indirectly by way of declining to issue new licenses, unless just compensation were paid.

The committee believes its suggestion is sound in law for the following reasons.

a. The 1912 statute permitted everyone to obtain a license.

As we have stated above, the Secretary had no discretionary power and he could be mandamused to compel the issuance of a license. The licenses were not for any stated term and could be revoked only for cause. The companies with established business under such a situation had a right to believe that their investments could not be destroyed by the mere repeal of the 1912 law.

- b. The situation is not analogous to the destruction of property rights involved in the passage of the prohibition laws, because in that case there were very large moral and police questions, and besides the laws were only passed after the Constitution itself had been amended.
- c. The obligation of the Federal government to pay just compensation for closing an existing radio station was recognized in the joint resolution of July 16, 1918, which permitted the President to take over radio stations during the time of war, but only upon payment of just compensation. It is to be noted that even when this power was repealed on July 11, 1919, the compensation provisions were specifically continued.
- d. The committee sees no newer constitutional authority for depriving the citizens of property rights under the pending legislation than was included under the 1912 legislation.
- c. The closing of stations by mere refusal to issue new licenses under the new legislation would be an indirect method of attempting to accomplish a beneficial result that had better be dealt with directly and by specific authority of law.
- f. The suggestion is entirely in accordance with Chancellor Wilson's decision in the Chicago Tribune case.
- g. The Secretary or the commission will avoid extended litigation and be able to procure advantageous results more promptly if he or it has the right and the obligation to pay compensation to the stations which are closed.
- h. The suggestion seems to us eminently fair and must appeal to the general public, to the stations which are closed, and to the stations which are permitted to continue to operate, as being reasonable and just.

Effect of "Due Process" Clause.

Speaking generally, the "due process" clause requires that the individual whose rights are adversely affected shall have his day in court with notice and opportunity to be heard. The Radio Act seems to comply with that requirement. Under Section 11, the licensing authority, before making a final determination that an application does not accord with the public interest, must notify the applicant of the time and place for a hearing and give him an opportunity to be heard. In case of an adverse ruling, Section 16 allows him an appeal to the Court of Appeals of the District of Columbia, where he is entitled to a hearing de novo.

It has been held that in addition to requiring notice and hearing, the due process clause also requires compensation to be made if private property is taken for public use. In these respects, the two clauses have similar application.

Depriving of Use is Generally a "Taking."

If a license for an existing station is refused, neither the law nor the action of the commission would take the property of the owner, in the sense of an actual physical seizure of it. It would still remain in the possession of its owner, but with practically only a junk value, for the only use for which it was intended and fitted would be legally prohibited. It may be contended that the constitutional inhibition is thus avoided.

The only value of property lies in the use that may be made of it. It may be said generally that the forbidding of an individual to use his property is equivalent to a taking of it, and that deprivation of use violates the constitutional guarantee to the same extent as would an actual physical seizure or destruction of the property itself. The Supreme Court of the United States has expressed itself on the general subject as follows:²

It would be a very curious and unsatisfactory result if in construing a provision of constitutional law, always understood to have been adopted for protection and security to the rights of the individual as against the government, and which has received the commendation of jurists, statesmen, and commentators as placing the just principles of the common law on that subject beyond the power of ordinary legislation to change or control them, it shall be held that if the government refrains from the absolute conversion of real property to the use of the public it can destroy its value entirely, can inflict irreparable and permanent injury to any extent, can, in effect, subject it to total destruction without making any compensation, because in the narrowest sense of that word, it is not taken for the public use. Such a construction would pervert the constitutional provision into a restriction upon the rights of the citizen, as these rights stood at the common law, instead of the government, and make it an authority for invasion of private right under the pretext of the public good, which had no warrant in the laws or practices of our ancestors.

¹ Chicago, Burlington, and Quincy Railroad v. Chicago, 166 U. S. 226.

² Pumpelly v. Green Bay Company, 13 Wall. 166, 177. See also Chicago Board of Trade v. Olsen, 262 U. S. 1; Village of Euclid v. Ambler Realty Company, 47 Sup. Ct. 115; Corneli v. Moore, 267 Fed. 456.

Public Power of the State.

Although under this general principle, deprivation of use may be equivalent to a taking of the property itself, the state and the Federal governments are vested with powers in the exercise of which they may forbid certain uses of property and thus cause loss or damage to the individual, for which he has no redress.

The state has the general police power, the right to legislate for the safety, health, comfort, and well-being of its citizens. If the act of the individual in the use of his property is so antisocial as to constitute a menace to the wellbeing of his fellow citizens, the police power of the state may be so exerted as to prevent him. The common illustration is in the law of nuisance. Property, or the use of it, which is a nuisance in fact may be abated, and its owner must stand the loss. The rule is expressed by the common statement that no one has a vested right in a nuisance. Neither is he entitled to compensation when he is forbidden to create or continue one. The legislature, within reasonable limits. may determine for itself whether or not a given act amounts to a nuisance and its conclusion will be accepted by the courts.1

In discussing the police power in its practical effects, the Supreme Court has said:²

Many laws which it would be vain to ask the court to overthrow could be shown, easily enough, to transgress a scholastic interpretation of one or another of the great guarantees in the Bill of Rights. They more or less . . . diminish property to a certain extent . . . An ulterior public advantage may justify a comparatively insignificant taking of private property, for what in its immediate purpose is a private use . . . It would seem that there . . . may be other cases . . . in which the share of each party in the benefit of a scheme of mutual protection is sufficient compensation for the correlative burden that it is compelled to assume.

Similarity of Federal Regulatory and State Police Powers.

It has been often said that the Federal government has no police power, and the statement may be taken as true

¹ For more detailed discussion, see p. 86.

¹ Noble State Bank v. Haskell, 219 U. S. 104, 110, 111.

when strictly construed. Yet in the entire field of interstate and foreign commerce, the Federal government exercises the same power as that exerted by the states under their police power. It does this under its constitutional right to regulate commerce between the states and with foreign nations. Indeed, the authority under this clause has been called a "police power" by the Supreme Court of the United States.¹

When Congress properly exercises its authority to regulate commerce, the courts take the same attitude as towards the exercise of police power by the states. There is the same rule to the effect that incidental damage caused to the individual affords no basis for a claim of compensation, and there is the same tendency to follow the judgment of Congress as to the necessity for regulation and the propriety of the means adopted for affording it.

The Supreme Court has declared the rule as to the necessity for compensation in such cases in the following language:²

If in the execution of any power, no matter what it is, the government, Federal or state, finds it necessary to take private property for public use, it must obey the constitutional injection to make or secure just compensation to the owner. Cherokec Nation v. Southern Kansas Railway, 135 U. S. 641, 659; Sweet v. Rechel, 159 U. S. 380, 399, 402; Monongahela Navigation Company v. United States, 148 U.S. 312, 336; United States v. Lunah. 188 U.S. 445. If the means employed have no real substantial relation to public objects which government may legally accomplish; if they are arbitrary and unreasonable, beyond the necessities of the case, the judiciary will disregard mere forms and interfere for the protection of rights injuriously affected by such illegal action. The authority of the courts to interfere in such cases is beyond all doubt. Minnesota v. Barber, 136 U. S. 313, 320. Upon the general subject there is no real conflict among the adjudged cases. Whatever conflict there is arises upon the question whether there has been or will be in the particular case, within the true meaning of the Constitution, a "taking" of private property for public use. If the injury complained of is only incidental to the legitimate exercise of governmental powers for

¹ Chicago Board of Trade v. Olsen, 262 U. S. 1, 41.

Chicago, Burlington and Quincy Railroad Company v. Drainage Commissioners, 200 U. S. 561, 593.

the public good, then there is no taking of property for the public use, and a right to compensation, on account of such injury, does not attach under the Constitution.

In a late case involving a conflict between the police power of the state, and the constitutional rights of the citizens, the Supreme Court said:

Government could hardly go on if, to some extent, values incident to property could not be diminished without paying for every such change in the general law. As long recognized, some values are enjoyed under an implied limitation and must yield to the police power. But obviously the implied limitation must have its limits, or the contract and due process clauses are gone. One fact for consideration in determining such limits is the extent of the diminution. When it reaches a certain magnitude in most, if not in all, cases, there must be an exercise of eminent domain and compensation to sustain the act. So the question depends upon the particular facts. The greatest weight is given to the judgment of the legislature, but it always is open to interested parties to contend that the legislature has gone beyond its constitutional power.

The manifest intention of Congress in the 1927 legislation is to regulate radio communication, in the public interest, as one phase of its general regulation of interstate commerce. The declaration of "public interest" aids little in the determination of legal authority. It may be assumed that any exercise of regulatory power over interstate commerce has the interest of the public as its motive and purpose. The police power of the states is exercised under the same standard.

Power to Regulate Includes Power to Prohibit.

The Act of 1927 may be differentiated from the common public utility laws of the states, in that it is directed in part against persons and property already engaged in commerce, while those acts have primary application to persons desiring to enter. The 1927 law prohibits the further operation of property already in use. In this respect, it may be urged that it is a prohibitory rather than a regulatory measure. The forbidding of an individual to engage in commerce is certainly prohibitory as to him.

Penn Coal Company v. Mahon, 260 U.S. 393, 413.

The constitutional authority vested in Congress is in terms to regulate interstate and foreign commerce, not to prohibit it. Yet every step in regulation necessarily takes the form of pro tanto prohibition. It must be either the absolute forbidding of a particular act or the requiring of an act in a certain way, which is tantamount to the forbidding of the contrary. Every measure of regulation necessarily interferes to some extent with private ownership and with the individual's right to use his own property. Regulation of use and its absolute prohibition differ therefore only in degree. On the strict basis of proprietorship only, the owner of a transmitting station has the same right to operate it in whatever manner he pleases as he has to use it at all.

The right of Congress to prohibit commerce absolutely as a phase of regulation has been before the Supreme Court in a number of cases. That court baldly stated in several decisions that the power to regulate includes the power to prohibit entirely. In accordance with this principle, it upheld acts of Congress prohibiting the transportation of lottery tickets, the Food and Drug Act prohibiting the transportation of impure foods and drugs, the White Slave Act prohibiting the transportation of women for immoral purposes, and the act prohibiting the transportation of intoxicating liquors.

It was this absolute power of prohibition which was relied upon to support the Child Labor Law prohibiting the transportation in interstate commerce of certain classes of goods manufactured by child labor.

But in its opinion declaring the Child Labor Law unconstitutional,⁵ the court differentiated the cases above referred to. The contention was made that they established the

¹ The Lottery Case, 188 U. S. 321.

^{*} Hipolite Egg Company v. United States, 220 U.S. 45.

² Hoke v. United States, 227 U. S. 308; Caminetti v. United States, 242 U. S. 470.

⁴ Clark Distilling Company v. Western Maryland Railway Company, 242 U. S. 311.

⁴ Hammer v. Dagenhart, 247 U. S. 251, 271.

doctrine that the power to regulate includes the authority to prohibit the movement of ordinary commodities. The court, however, said that the contrary was the fact, since these cases rested upon the character of the particular subjects dealt with; that in each of them the use of interstate transportation was necessary to the accomplishment of harmful results; and that proper regulation of interstate commerce could be brought about only by prohibiting the use of its facilities to effect the evil intended. The court proceeded to say that neither was such a purpose disclosed by the act under consideration nor was the character of the articles transported such as to make prohibition necessary.

There was a very strong dissent, based mainly upon the argument that the power to regulate is absolute, the power to prohibit necessarily included within it, and that it is for Congress alone to determine the propriety of its exercise.

This decision is not a denial of the complete power of Congress to regulate interstate commerce. It is a holding that in the exercise of that power Congress must confine itself to regulation, and may not, under the cloak of regulation, grasp powers not delegated to it.

Effect of Licenses under 1912 Law.

It may be said that all persons now engaged in the business of interstate radio communication entered it with the express permission of Congress, manifested by licenses issued to them under the 1912 law, which by the terms of that act are revocable only "for cause" and that the privileges thus granted may not be arbitrarily abrogated. Some station owners may argue further that at the time when they commenced operations, the communication field was clear and undisturbed and that if there is now confusion and interference, it is caused by later intruders who are alone responsible. Decisions bearing upon both of these positions are to be found in the cases defining Federal power over navigable waters.

¹ See Report of Committee of American Bar Association, p. 66.

A case involving the same features of revocable permission is Bridge Company v. United States. A bridge had been commenced under an Act of Congress which contained a clause permitting Congress to "with-draw assent" if substantial interference with navigation resulted. While the bridge was in process of construction, Congress required certain alterations, which cost an additional \$200,000, but Congress did not formally declare that the bridge caused substantial interference with navigation.

The company claimed that it was proceeding under express Congressional authority, revocable only if interference with navigation resulted; that there was no such interference in fact; and that Congress had not so found or declared; that therefore the compelling of the changes in plan amounted to a taking of its property for which it was entitled to compensation.

The court refused to adopt any of these arguments. It declined to consider whether the bridge had become an obstruction in fact, saying that the judgment of Congress in this regard was final. Since the authorizing act itself reserved the right to withdraw assent, which was equivalent to revoking permission, the company acquired its rights subject to that risk and could not complain when the reserved power was exercised, nor would the court inquire as to the propriety or justice of the Congressional decision. The Court therefore denied compensation.

Regulations in Aid of Navigation.

Pertinent discussions of the regulatory power of Congress may be found in the many cases dealing with navigation improvement, which have frequently involved the impairment or destruction of private property, and which have held that the injury was incidental to the legitimate exercise of the power of regulation and that compensation was not required under the Constitution.²

^{1 105} U.S. 470.

² Cases reviewed in Philadelphia Company v. Stimson, 223 U. S. 605. And see United States v. Chandler Dunbar Company, 229 U. S. 53; Greenleaf Johnson Lumber Company v. Garrison, 237 U. S. 251.

Application of Rules to Radio Conditions.

From the general principles thus stated, we may find some guidance towards a determination of the constitutionality of the pertinent features of the Radio Act.

The question may arise in several ways. It may be presented through commission action absolutely refusing a license to the owner of present apparatus; or it may come from a requirement by the commission that a station now operating full time must give up part time to a competitor, thus pro tanto forbidding the owner to operate it; or it may reach a controversial status though a decision of the commission refusing to allow an owner to continue to use a desirable wavelength on which he has been operating, and assigning him one of much lesser value and on which the efficiency and extent of his communications are greatly impaired. Commission action may thus descend in gradation from total prohibition at the top of the scale to impairment of efficient operation at its lower end. difference is in degree only, for in each instance the owner is deprived of some use of his property. The extent of the diminution might have some influence on court decision, 1 and an important element would be whether, in the particular case, the act complained of was reasonably necessary in the regulation of radio communication, aimed at an evil and calculated to correct it, in which case any damage resulting incidentally would be without resource, or whether the action was so unreasonable and arbitrary that the courts could say that the real intent was to take the property, the claim of regulation being merely a cloak to hide the true purpose.

Arbitrary action on the part of the commission is not to be anticipated. Until a specific instance of the kind arises, discussion is necessarily academic.

Right of Appeal.

Under Section 16 of the act, any person whose application is rejected may appeal to the Court of Appeals of the Penn Coal Company v. Mahon, 260 U. S. 393.

District of Columbia where he is entitled to a hearing and determination de novo. The provision follows that already in force for obtaining a review of certain decisions of the Commissioner of Patents and of the Public Utility Commission of the District of Columbia. While the result is undoubtedly to impose upon the court the performance of an administrative rather than a judicial function, the power of Congress to so provide has been upheld by the Supreme Court in cases arising under the previous statutes.

Section 16 also attempts to allow an appeal from revocations of licenses not only to the Court of Appeals of the District of Columbia but likewise to the "District Court of the United States in which the apparatus licensed is operated." The validity of this provision may well be doubted. There is a distinct difference between the jurisdiction of the ordinary Federal courts and of the courts of the District of Columbia in this regard.²

Assignment of Wavelengths.

By the terms of Section 4, under the test of "public convenience, interest, or necessity," the commission is authorized to assign bands of wavelengths to classes of stations and particular wavelengths to individual stations. The obvious effect of the law is to reinstate the system in practice prior to the adverse constructions given the 1912 law, under which wavelengths were first allocated in bands for the use of the various services, and as to broadcasting, a special wavelength within the band was assigned to each station. This is perhaps the most important phase of the commission's duties, for the efficiency of communication and the elimination of interference depend largely upon the care with which allocations are made. The idea of separate assignments to each station originated at the radio conference of 1923 and was carried into subsequent

¹ United States v. Duell, 172 U. S. 576; Keller v. Potomac Electric Power Company, 261 U. S. 428.

² Liberty Warehouse Company v. Grannic, 47 Sup. Ct. 282; Postum Cereal Company v. California Fig Nut Company, 47 Sup. Ct. 284.

practice by departmental methods.¹ The 1927 law gives legality to the system so established.

Limitation of Station Power.

Under Section 4C, the commission has authority "to determine the power which each station shall use." The right to do so is essential to proper regulation and wavelength assignment, for power controls both service area and interference range. The act, in this respect, remedies another deficiency in the 1912 law, as interpreted by the Attorney General.²

Time Division.

The right to compel stations to divide time is also conferred by Section 4C. By the exercise of this authority, it becomes possible to assign a single wavelength to two or more stations in a given locality without creating interference. The practice has been long in vogue, and is now given legislative sanction.³

Location of Stations.

By Section 4D, authority is given to "determine the location of classes of stations or individual stations." No such power was exercised under the 1912 law. The growing tendency to obviate interference with nearby listeners by locating stations outside of thickly settled sections may make this section of considerable importance, and it has direct bearing upon the validity of ordinances adopted by the governing bodies of municipalities which attempt to accomplish that purpose.

Construction Permits.

Under Section 21 of the 1927 act, an operating license may not be granted for any station the construction of which, after the effective date of the act, is undertaken

¹ See p. 41 et seq.

¹ See p. 45.

For case involving time division under 1912 law, see p. 43 et seq.

without a permit. This provision is wholly now in radio law. Under the 1912 act, the license was not granted until the station was completed and ready for operation. As a result, after congestion arose in broadcasting, there were instances of the completion of stations, without notice to the Federal authorities, by persons ignorant of conditions, who after the expenditure of their funds learned for the first time that no free channels were available. cient installation requires advance knowledge of such features as the wavelength which may be used and the power to be permitted. Only by application in advance of construction can this information be obtained. In this requirement, the Radio Act follows the Federal Power Act1 and the laws of many states relative to the construction of diversion dams in streams. It will be noted that the section does not prohibit the erection of the station, but makes the permit a condition precedent to the issuance of the license, thus avoiding any question as to Federal authority.

The test for the granting or refusal of a construction permit is the same as for the operating license, namely, public convenience, interest, or necessity, and the same considerations would control.

Rebroadcasting.

Section 28 forbids "any broadcasting station" to "rebroadcast the program or any part thereof of another broadcasting station without the express authority of the originating station." Rebroadcasting is not defined, but is presumably used in its radio sense, in which it means the simultaneous reproduction of a program which another station originated. The prohibition is directed to the "station" and consent of the originating "station" is required, this being one of the few instances in the law where apparatus is given personality and treated as though it could act and contract. The section is doubtless to be

^{1 41} Stat. 1063.

construed as though it read "station owner." It is of some consequence to note that the interest and wish of the individual who actually creates the broadcast matter—the singer, speaker, or musician—is entirely disregarded, his consent to the rebroadcasting not being required.

The prohibition would not be applicable to a telephone company which sets up receiving apparatus in its exchange, picks up a program, and sends it over the wires to such of its patrons as will pay for the service. This practice is becoming somewhat common, but since it is not carried on by a "broadcasting station," nor is it really rebroadcasting, it does not fall within the language of the act.

Control of Stations in Time of War.

Sections 6 and 7 authorize the President, whenever he proclaims the existence of war, threat of war, state of public peril, disaster, or other national emergency, or in order to preserve the neutrality of the United States, to cause any radio station to be closed and its apparatus and equipment removed, or to authorize the use and control of stations by departments of the government. Payment of just compensation is required. Section 11 provides that every license shall be subject to those provisions.

The provisions are more comprehensive than those in the 1912 law but in effect are substantially the same. The validity of the clause in the 1912 act and the action taken under it have already been discussed.²

Limitations of 1927 Act.

The basic purpose of the 1927 act is the prevention of interference between transmitting stations to the end that the public may have uninterrupted reception and efficient service. The Federal government recognizes its duty to keep the channels of interstate and foreign radio communication free from obstruction and to regulate commerce upon them so that traffic may move without interference. Fur-

¹ For detailed discussion, see chap. IX.

¹ See p. 48.

ther than that this act does not go. It makes no attempt to control the internal management of the stations. business affairs of the owner are left to his own judgment. There are no provisions for censorship and no limitations upon the character of transmitted matter, except for the protection of public decency. Relationships between the station owners and the public and between themselves remain unaffected by this act, except for the recognition of a paramount public interest in the service afforded. There is no limitation on the operation of receiving sets, no requirements of a license for them, nor imposition of a tax upon them. Having recognized at the outset that the basis of Federal legislation is the regulation of interstate and foreign commerce in the public interest, the act remains consistent with that purpose and confines itself to the provisions necessary to accomplish it.

CHAPTER VI

STATE JURISDICTION

Legislative Power of States.

The legislative power of the several states is absolute and extends to all persons and property within their respective boundaries. Being general, it includes both persons and property engaged in radio communication. An inquirv into state authority in radio matters is therefore not directed to the discovery of a source of power, but to a consideration of the extent to which the power is limited or confined. Limitations are to be found in the Constitution of each state and the Constitution of the United States. the provisions most obviously applicable to possible legislation regulating or in aid of radio communication being the common clauses requiring due process of law, prohibiting the taking of private property for private use and allowing a taking for public use only upon just compensation, requiring equal protection of the laws, and the clause of the Federal Constitution giving Congress authority to regulate interstate and foreign commerce.

As yet there have been few attempts at state legislation on any feature of radio communication, whether by way of regulation or protection. It is not possible to foresee the various instances in which state control may be invoked in the future, and wholly inappropriate to attempt to give, in a work of this character, any general discussion of such broad subjects as the legislative power, the police power, or constitutional limitations, or to cite the voluminous decisions bearing upon them. All that can be done here is to indicate some of the questions that may arise and the principles upon which they must be determined.

Police Power.

It may be anticipated that any legislation that may be adopted as to radio will be based upon the police power of the state, which in some aspects is not subject to the constitutional limitations already referred to. Even though interstate commerce is affected, the states still retain the power to legislate for the protection of the lives, health, and property of their citizens, the preservation of good order, the aiding of public convenience, or the general good.

There is nothing in radio communication which removes it from the police power of the state. The property used is subject to police power to the same extent, no more and no less, as all other property in the state similarly situated. In so far as its use endangers life or threatens property, as by causing or increasing fire hazard, it is clearly subject to legislative control. Many instances of regulations of this character will doubtless present themselves, and to the extent that the practices sought to be remedied endanger life or property, they will involve few legal difficulties.

Regulation of Reception Interference.

The police power, however, is not limited to the protection of life and property.

It extends, as stated, to matters of general convenience and the public good—a broader and much more indefinite field and one in which doubts and uncertainties necessarily arise. By far the most interesting and important questions, which also present the greatest difficulties, arise from the consideration of the exercise of these phases of the power.

It has been said that all property is held on the implied condition that the owner will not so use it as to interfere with the rights of others, or be injurious to the community,

- 1 United States v. Knight Company, 156 U.S. 1, 11.
- ² Lake Shore, etc., Railroad Company v. Ohio, 173 U. S. 285, 292.
- ⁴ Shiller Piano Company v. Illinois Northern Utilities Company, 123 N. E. 631, 288 Ill. 580.
- ⁴ Howard v. State, 242 S. W. (Ark.) 818; Sanitary District of Chicago v. Chicago & Alton Railroad Company, 108 N. E. 312, 267 Ill. 252; State v. Barrett, 87 N. E. 7, 172 Ind. 169; Pittsburgh, Cincinnati, Chicago, and Saint Louis Railway Company v. Chappell, 106 N. E. 403, 183 Ind. 141.

and that the right of every person to pursue a business, occupation, or profession is subject to the paramount power inherent in every government to impose such restrictions and regulations as the protection of the public may require.¹ The state may, in the exercise of its police power, not only deal with acts of commission but with those of omission, if the result of the omission is to invade the rights of others or of the public.² It may regulate the carrying on of a business injurious when improperly conducted, or prohibit one essentially harmful.³

As to radio, such instances are in the form of legislative attempts to deal with or prevent interference with reception. There has already been some attempted regulation of this sort, a portion of an ordinance of the city of Minot, North Dakota, along these lines being quoted in the note. Although the ordinance in itself is of small importance, it

- 1 Wain v. City of Fort Worth, 258 S. W. (Tex.) 1114.
- 2 People v. Natural Carbonic Gas Company, 119 N. Y. S. 1151.
- ³ Brady v. Mattern, 100 N. W. (Iowa) 358.
- *Sec. 1. Because of the educational and instructive information constantly broadcasted from many parts of the world by radio and received by numerous people in Minot, it is hereby declared unlawful for anyone to knowingly and unnecessarily electrically disturb the atmosphere within the limits of the city of Minot, North Dakota, by any means or device whatsoever not necessarily incident to the operation of machinery or apparatus necessarily used in business or occupation.
- Sec. 2. That Section 1 hereof shall include and cover knowingly permitting unnecessary electrical disturbances of the atmosphere by any electric light plant dynamo, device, or machinery operated in connection therewith; or the knowingly maintaining and operating the same in such condition that the same shall unnecessarily electrically disturb the atmosphere to such an extent as to amount to interference in the reception of broadcasting programs by radio.
- Sec. 4. Anyone violating any of the foregoing provisions hereof shall be deemed maintaining a public nuisance and such nuisance shall be forthwith abated by the confiscation and destruction of apparatus constituting such nuisance.

Portland, Oregon, has a somewhat similar ordinance, passed January 12, 1927. Minneapolis adopted one in February, 1927. It is reported that an ordinance of Dixon, Illinois, makes it unlawful to operate or maintain any device that interferes with radio reception, intended to compel a telephone company to do away with a vibrating battery charger.

furnishes a convenient basis for discussion of the general principles involved.

The first two sections of this ordinance are plainly directed to the elimination of radio interference, a term commonly used to define any extraneous electrical disturbance causing sound in a receiving set which prevents or impairs the reception of desired matter. It may be wholly innocent or the result of negligence or malicious intent. Whatever the source and whatever the motive, its effects are equally serious. Radio receivers are intended to pick up, amplify, and bring to the ears of the listener the particular communications desired, but frequently they are accompanied by unwelcome sounds and noises which interrupt hearing or destroy the communication entirely. It is wholly a question of the intensity or loudness of the two sounds. The stronger conquers.

The disturbing effects usually come from non-radio sources, such as X-ray or violet-ray machines, leaky insulators, elevator switches, trolley wheels, contact shoes, poorly bonded joints, and other sparking electrical contacts, hightension power lines, testing apparatus, motor and generator commutators, and electrical precipitation plants. Receiving sets of certain types, when unskilfully used, likewise emit disturbing emanations. The interference may affect a few individuals or a great number, depending upon its character and intensity. Instances are known of disturbances so continuous and far reaching as to make reception absolutely impossible in entire communities during all of the usual broadcasting periods. Recent surveys have indicated that about 75 per cent of all disturbance to radio reception comes from non-radio electrical devices and only 25 per cent from the atmospheric manifestations commonly called static. In a single month, the radio service of the Department of Commerce has received over 5,000 complaints of man-made interference.

The devices which cause the interference, and the businesses in which they are used, are lawful in themselves.

The transmission and reception of radio messages is likewise a legitimate occupation. The present inquiry involves the power of the state to declare the mutual rights as between them, to protect one against the incursions of the other, and generally to legislate on the subject. The question of whether relief could be obtained by the injured party by civil action under common law principles is discussed later.¹

Taking as a basis for discussion the Minot ordinance, it may be assumed that a large number of the residents of that city have equipped their homes with radio receiving sets. They use them for the receiving of all kinds of broadcast communications, to obtain information valuable in the conduct of their business affairs, for instruction, and for entertainment, for "educational and instructive information." as this particular ordinance says. The equipment is becoming as essential as the telephone, as useful as the newspaper. The investment is legitimate and the use is lawful. In the Minot instance, apparently there is, or was, an electric light plant from which came electrical discharges which interfered with reception. There have been instances, though not from lighting systems, where the electrical discharge was of such violent character as to blanket the entire community with its disturbance, destroying communication between the broadcaster and the many listeners, depriving them of the service for which they equipped their homes, impairing the operating value both of the transmitting and receiving apparatus, and perhaps even rendering all reception impossible. May the state intervene under its general police power to compel the elimination of the disturbance?2

Interference as a Nuisance.

It may be that the interference with radio reception in many cases is sufficient to amount to a nuisance under

¹ See chapter VII.

² The question of the power of the city to take action by ordinance is a local one dependent upon the constitution and statutes of the particular state, and is therefore not considered.

general principles of law, as affecting the comfort and wellbeing of the community. Assuming that the disturbance does in fact amount to a nuisance, the state has plenary authority to deal with it. The suppression of a nuisance has in the past been a common instance of the exercise of the police power and it is still largely directed to that end.

Legislative Declaration of Nuisance.

The Minot ordinance declares that the interference dealt with amounts to a public nuisance. A legislative declaration does not make a nuisance of a property use which is not so in fact, but the courts are loath to go behind such a finding and decide to the contrary.

The Supreme Court of Wisconsin has said:2

With the passing of time, social standards conform to new ideals. As a race, our sensibilities are becoming more refined, and that which formerly did not offend cannot now be endured. That which the common law did not condemn as a nuisance is now frequently outlawed as such by the written law. This is not because the subject outlawed is of a different nature, but because our sensibilities have become more refined and our ideals more exacting. Nauseous smells have always come under the ban of the law, but ugly sights and discordant surroundings may be just as distressing to keener sensibilities. The rights of property should not be sacrificed to the pleasure of an ultra-esthetic taste. But whether they should be permitted to plague the average or dominant human sensibilities well may be pondered.

Many other instances of the willingness of courts to follow legislatures in their definitions of nuisances might easily be cited.³

¹ Yales v. Milwaukee, 10 Wall. 497; Spann v. Dallas, 235 S. W. 513.

² State ex rel. Carter v. Harper, 196 N. W. (Wis.) 451, 455. Village of Euclid v. Ambler Realty Company (Nov. 22, 1926), 47 Sup. Ct. 115, contains an interesting discussion on nuisances. The court said that regulations, the wisdom of which as applied to existing conditions is apparent, would have been rejected as arbitrary and oppressive a century ago.

² Winkler v. Anderson, 104 Kan. 1, 177 Pac. 521; Patterson v. Johnson, 214 III. 481, 73 N. E. 761, 764; Bowman v. Virginia State Entomologist, 105 S. E. 141; See also Louisiana State Board of Agriculture and Immigration v. Tanzmann, 140 La. 756, 73 So. 854.

Police Power Not Confined to Nuisances.

But the operation of the police power of the state is by no means restricted to nuisances. It has expanded far beyond that field, if it ever was confined to it, and has interposed in many situations once considered as wholly of private right. It enlarges to meet new conditions, to keep pace with new developments, to meet the requirements of advancing civilization, and adjusts itself to the necessities of moral, sanitary, economic, and political conditions. A recent California case, in upholding the constitutionality of a zoning law, said:

In short, the police power, as such, is not confined within the narrow circumscription of precedents, resting upon past conditions which do not cover and control present-day conditions obviously calling for revised regulations to promote the health, safety, morals, or general welfare of the public; that is to say, as a commonwealth develops politically, economically, and socially, the police power likewise develops, within reason, to meet the changed and changing conditions. What was at one time regarded as an improper exercise of the police power may now, because of changed living conditions, be recognized as a legitimate exercise of that power. This is so because "what was a reasonable exercise (of this power) in the days of our fathers may today seem so utterly unreasonable as to make it difficult for us to comprehend the existence of conditions that would justify same; what would by our fathers have been rejected as unthinkable is today accepted as a most proper and reasonable exercise thereof." Streich v. Board of Education, 34 S. D. 169, L. R. A. 1915A, 632, Ann. Cas. 1917A, 760.

A state court pertinently remarked:

In brief, "there is nothing known to the law that keeps more in step with human progress than does the exercise of this power."

¹ People v. Weller, 202 N. Y. S. 149, 207 App. Div. 337; Liberty Warehouse Company v. Burley Tobacco Growers Cooperative Association, 271 S. W. (Ky.) 695; City of Aurora v. Burns, 149 N. E. 784, 319 Ill. 84; ex parte Sales, 233 Pac. 186; ex parte Tindall, 229 Pac. 125.

² Miller v. Board of Public Works, 234 Pac. 381.

³ Miller v. Board of Public Works, 234 Pac. 381.

And the Supreme Court of the United States has said:

It may be put forth in aid of what is sanctioned by usage, or held by the prevailing morality or strong and preponderant opinion to be greatly and immediately necessary to the public welfare.¹

Novelty is no argument against constitutionality,² and even esthetic considerations have been given weight, especially in recent cases. The Maryland Court of Appeals,⁸ in upholding a zoning ordinance, quoted with approval from Ware v. Wichita,⁴ the statement that "there is an esthetic and cultural side of municipal development which may be fostered within reasonable limitations."

Examples of the exercise of the power are found in the prohibition of steam laundries within 150 feet of a church, school, or hospital, on the ground that "the noise... would have a tendency to greatly disturb the quietude of those at public worship, children at school, or the sick in hospital;" in the regulation of the location of garages, partly on the ground of the noises they create; and in the control of the operation of factories in certain sections of Niagara Falls because of considerations of scenic beauty and historical associations.

Here again, as in the case of nuisance definition, the courts will presume that the legislature had substantial grounds for its action, great weight being given to the legislative determination that the exercise of the police power was necessary and appropriate in the particular instance, and the enactment will not be overthrown unless clearly arbitrary and unreasonable and without substantial rela-

¹ Noble State Bank v. Haskell, 219 U. S. 104. See also Block v. Hirsh, 256 U. S. 135.

³ People ex rel. Durham Realty Corporation v. La Fetra, 230 N. Y. 429, 130 N. E. 601, 607.

^{*} Goldman v. Crowther, 147 Md. 282, 304.

^{4 113} Kan. 153, 214 Pac. 99.

⁶ Walcher v. First Presbyterian Church, 184 Pac. 106. See also the Euclid Case cited supra.

^{*}Parker v. Colburn, 236 Pac. 921; General Baking Company v. Board of Street Commissioners, 136 N. E. 245, and cases cited.

⁷ In re Russell, 158 N. Y. Sup. 162.

tion to the public health, safety, morals, or general welfare.¹ If the evil sought to be remedied is legitimately within the police power, it may be abated even though the value of prior investments may be diminished or a business injured.²

Application of Rules to Radio Interference.

Legislation dealing with disturbance of radio communication necessarily takes the form of a prohibition of the continuance of the operations causing the interference. In few, if any, cases would it require the abandonment of an enterprise. In many instances, the electrical discharge causing radio interference is the result of current leaks which represent a direct waste and a loss to the owner which he is himself anxious to prevent, as was presumably the situation in the Minot case. Objectionable discharges are frequently the result of clear negligence in construction or carelessness in operation. They are always preventable, though correction may involve expense. An X-ray machine, for instance, while apt to cause radio disturbance in its ordinary condition however skilfully operated, may be so shielded, at little expense, as to prevent the escape of the annoying discharge. Generally it may be said that the prevention of the interference is always within the power of him who causes it, while the one who suffers the molestation is helpless. Minot listeners could do nothing to cure their difficulties. The listener is like the neighbor of a landowner who allows noxious weeds to thrive on his land and broadcast their seeds in all directions, or who furnishes a

¹ Graves v. Minnesota, 47 Sup. Ct. 122 (Nov. 22, 1926); Village of Euclid case, supra; ex parte Farb., 174 Pac. (Cal.) 320; Rowland v. Morris, 111 S. E. 389, Mack v. Westbrook, 98 S. E. 339; State v. Barrett, 87 N. E. 7, 172 Ind. 169; Stewart v. Brady, 133 N. E. 310, 314, 300 Ill. 425; People v. Stokes, 281 Ill. 159, 118 N. E. 87; People v. Elerding, 254 Ill. 579, 98 N. E. 982; People v. McBride, 234 Ill. 146, 84 N. E. 865; Sperry and Hutchinson Company v. State, 122 N. E. 584. Gillow v. People, 268 U. S. 652; affirming People v. Gillow, 136 N. E. 317, 234 N. Y. 132; Miller v. Board of Public Works of the City of Los Angeles, 234 Pac. 381.

² Ex parte Hadacheck, 132 Pac. 584, 165 Cal. 416, Aff. 239 U. S. 394; E. Fougera and Company v. City of New York, 166 N. Y. Sup. 248, 178 App. Div. 824.

breeding place for insect pests which spread to and destroy adjoining orchards. The injured party in each case is powerless to prevent the damage.

Since the situation arises from a conflict of rights still undefined, whose precedence is undetermined, one impinging upon and destroying the other, the discomfort affecting a great mass of citizens who are making use of an everyday household utility, it may well be that the state may properly intervene to declare the relationships between them, to give to one superiority against the unnecessary invasion of the other and to extend to radio reception the same measures of protection which it has given to others under its power to preserve order and promote the public welfare.

The Federal government has made no attempt to regulate interference with interstate communications from non-radio sources, thus leaving the field unoccupied. Such instances always present local problems, each community having its distinctive difficulties different in kind and degree from those affecting others. The whole problem would therefore seem one particularly suitable to local rather than national control.

Prohibition of Station in Localities.

Section 3 of the Minot ordinance suggests another interesting question. It attempts to prohibit the operation of stations within that city except for a very limited period.

The apparent purpose is to compel stations to be located outside of the city limits, so as to avoid the blanketing effects which result upon receiving sets within the immediate station vicinity. It is a recognition of the fact that the best present-day practice requires station location outside of congested centers. In this respect the ordinance is in line with the many instances of prohibitions of certain

¹ Sec. 3. That it shall be unlawful during five nights of every week to wit: Sunday night, Tuesday night, Wednesday night, Friday night and Saturday night, of each week from 6 o'clock p.m. to 2 o'clock a.m. of the following morning, for any person not engaged in interstate broadcasting of programs or commercial messages to broadcast or transmit or attempt to transmit messages by radio telegraph by code, signals, voice, or otherwise.

activities within cities or within residential districts. It is akin to either the banishment of nuisances or the zoning provisions, and its validity in respect to stations already erected, as affected by the due process clause and other constitutional provisions, would be determined under the same principles, due regard being given to the seriousness of the wrong sought to be remedied, and to the declaration of its nuisance character. The exception of stations engaged in interstate commerce avoids the question of constitutionality, while at the same time it greatly diminishes the effect of the section since, as already pointed out, few stations are wholly intrastate.

The question of the power of the state to impose any conditions upon radio communication in its interstate aspects may arise in several ways. It is possible, for instance, that a city might forbid the operation of any transmitting station within its limits, on the line adopted by the city of Minot as to stations not engaged in interstate commerce.² The state may attempt to protect existing stations by forbidding all interference, including that resulting from the operations of those coming later into the field.

An example of this kind is found in a bill introduced in the Connecticut legislature, which made unlawful all interference with broadcasting during certain hours,³ but neglected to state which of two stations interfering with each other should be guilty under the law. The bill was not passed, but its introduction suggests the direction in which the legislative mind may work. The regulation of interference between transmitting stations is necessarily

¹ The power to determine the location of stations is placed in the Radio Commission by the 1927 act, Sec. 40.

² Minneapolis has such an ordinance, adopted in February, 1927.

³ Sec. 1. It shall be unlawful, between the hours of 6 o'clock in the afternoon, and 12 o'clock, midnight, for any person or corporation to emit any noise, sound, or disturbance, by means of any instrument or apparatus, which will interfere with, affect, or disturb, any radio broadcasting, or radio receiving.

Sec. 2. Section 1 shall not apply to any SOS call or signal, or any signal sent out for the same purpose.

a regulation of interstate commerce, since it is brought about only by providing that one station or the other must cease or modify its interstate communication methods. The few conceivable instances of intrastate transmission may be disregarded. The station owner deprived of the use of his property would doubtless argue that he was engaged in interstate commerce and that consequently his operations were beyond the control of the state. The other side would answer that the states have not surrendered their police power in spite of the interstate commerce clause in the Federal Constitution, and that even such commerce can be indirectly affected by a proper exercise of it, especially in the absence of Federal legislation, to which the aggrieved owner would reply that by the Acts of 1912 and 1927, Congress evidenced its intention of taking over the entire subject.1

Radio as a Public Utility.

The discussion of state regulation under the police power has assumed that radio communication has not yet entered the class of public utilities and that it still retains a wholly private character. If, however, this communication system, or any of its elements, is to be considered a public utility, the regulatory power of the state is greatly broadened. The right to supervise intrastate rates and charges, to prohibit discrimination, to prescribe service, including character of programs, represents a few of the important functions which might be claimed to fall within state authority under the utility theory. It becomes necessary, therefore, to determine the present status of radio communication in this respect. Consideration involves mixed questions of law and fact.

Federal Power Not Affected.

Since Federal authority, already discussed, depends upon the right to regulate interstate commerce and not upon police power, it remains unaffected by any question of the 'Napier v. Atlantic Coast Line Railroad Company, 47 Sup. Ct. 207. public or private status of the station. Federal power is complete in any event and discussion of the subject is relevant only as to the extent of lawful state control.

Telegraphic Services.

On this question, as indeed on all other subjects, the distinction must be kept in mind between the commercial point-to-point radio systems and the other radio classes. They are dissimilar both in purpose and in business methods. Like the rival wire systems, the commercial radio companies engaged in transoceanic service and in communication between ships and shore or between places on land have already devoted themselves to the public, conduct their business for private gain, offer their facilities to the public generally, and transmit messages for everyone willing to pay the charges. In this respect, as in others, they are akin to the commercial telegraph companies.

Amateur Communication.

The amateurs are not engaged in business nor in commercial service of any kind. Their activities are all clearly outside of the public utility field.

Broadcasting Stations.

For the purposes of this discussion, the broadcasting stations fall into two classes, first, those which make no charge for their services and are devoted entirely to matter which the owner himself desires to send out, and, second, those which are operated wholly or in part on a toll basis, their services being open for pay to such persons as the owner may allow to use them.

So far as concerns the receiving end, these two classes are identical. Each serves the public generally. Each ordinarily endeavors to reach as large a part of it as possible. The programs of each are available to everyone who has the necessary receiving set. The difference is entirely in the attitude of the station owner towards the

individual who wishes to transmit. Towards the listener, their attitude is the same.

Both classes today are operated as private enterprises. In neither case does the owner hold himself out as ready to furnish service to the entire public. He controls his station at his own will, as any other piece of private property, inviting others to use it, or refusing their requests at his pleasure. He serves the listening public by furnishing matter which he believes acceptable, but his listeners do not compel service nor dictate the character of program. It is to his advantage to satisfy them, but he is the sole judge as to how he shall do so.

Attitude of Public.

In spite of the fact that the listeners make no direct payment for the service they receive, there exists a feeling, and it has found expression, that they somehow have a right to demand service, to have some part in program selection, to require the transmission of particular matter which they desire, and generally to a recognition of the conceded fact that the whole broadcasting structure finally rests upon them. Likewise, there are those who demand the privilege of using the transmitting stations for the dissemination of their ideas to the public, sometimes wishing free service, sometimes expressing a willingness to pay what is charged Instances of this sort have arisen in political campaigns and the individual refused has felt himself aggrieved and deprived of a rightful privilege. The question of the right to discriminate is raised, and censorship by the owner denounced. An interest is claimed by the public in both the transmitting and the receiving end.

The question for determination is as to whether broadcasting is affected with a public interest in the legal sense so that the recognized power of the state over all public utilities may be exercised over broadcasting to give legislative recognition to all or any of the desires so expressed.

¹ As to candidates for public office, see Radio Act of 1927, Sec. 18.

Public Interest a Legislative Question.

The declaration that a property or business is affected with a public interest is primarily for the legislature rather than the courts. The question has usually arisen from attacks upon the constitutionality of legislative acts which have attempted to impose regulation. The policy involved in declaring public what was theretofore considered, by the owner at least, private, is for the legislature, and courts hesitate to take the duty upon themselves. In a Texas case, the court said that if the magnitude of a particular business is such, and the persons affected by it are so numerous, that the interests of society demand that the rules and principles applicable to public employments should be applied to it, this would have to be done by the legislature, before a demand for such use could be enforced by the courts.

The Supreme Court of Illinois states the rule as follows:2

Ordinarily the adoption of new rules of public policy, or the application of existing rules to new subjects, is for the legislature and not for the courts. Accordingly, it may be held to be a general, though perhaps not an invariable, rule that the question whether a particular business, which has hitherto been deemed to be private, is public and impressed with a public use is for the legislature.

Neither will mere use by the public, in the absence of dedicatory intent on the part of the owner, impress a public character upon private property. In a case in which it was claimed that the public through permissive use of a wharf had acquired a right to continue that use against the will of the owner, the Supreme Court of the United States said:³

The public can obtain no adverse right as against such owner by mere use. To obtain it there must be an intention on the part of the owner to dedicate the property to the use of the public, and there must be an

¹ Ladd v. Manufacturing Company, 53 Tex. 172.

²American Live Stock Commission Company v. Chicago Live Stock Exchange, 143 Ill. 210, 32 N. E. 274, 282. But see State v. Nebraska Telegraph Company, 17 Neb. 126, 52 Am. Rep. 404, 408.

^{*} Weems Steamboat Company v. People's Company, 214 U. S. 345, 357.

acceptance of such dedication on the part of some public authority, which may sometimes be implied (but not in such a case as this), and in the absence of such dedication and acceptance the use will be regarded as under a simple license, subject to withdrawal at the pleasure of the owner.

Dedication Must Be Voluntary.

Devotion of property to public use is a voluntary act. It may not be compelled. In adopting regulatory law, the legislature must base its action on the existing fact that the owner himself has so dedicated his property. The law-making body does not change the character of the use but, finding it already public, proceeds to regulate it. It is not within legislative power to transform a private business into a public one without compensation for the taking, nor to force any man against his will to enter upon a public service.

The Supreme Court of the United States has said:1

It is beyond the power of the state by legislative fiat to convert property used exclusively in the business of a private carrier into a public utility, or to make the owner a public carrier, for that would be taking private property for public use without just compensation, which no state can do consistently with the due process of law clause of the Fourteenth Amendment.

The principle is that, having once voluntarily devoted his property to such use, the legislature may regulate it in the public interest. It may regulate but not create.

Application of Rules to New Enterprises.

The novelty of radio communication does not affect the determination. The willingness of the courts to apply the principle to new enterprises as they grow and take on public character is expressed by the Supreme Court as follows:²

It would be a bold thing to say that the principle is fixed, inelastic, in the precedents of the past and cannot be applied though modern economic conditions may make necessary or beneficial its application. In other words, to say that government possessed at one time a greater power to recognize the public interest in a business and its regulation to promote the general welfare than government possesses today.

¹ Michigan Public Utilities Company v. Duke, 266 U. S. 570, 577. And see the Pipe Line Cases, 234 U. S. 548, concurring opinion.

German Alliance Insurance Company v. Kansas, 233 U.S. 389, 411.

In applying the rule to the telephone, then a new invention, the Supreme Court of Nebraska said:

This reasoning is not met by saying that the rules laid down by the courts as applicable to railroads, express companies, telegraphs, and other older servants of the public, do not apply to telephones, for the reason that they are of recent invention and were not thought of at the time the decisions were made, and hence are not affected by them, and can only be reached by legislation. The principles established and declared by the courts, and which were and are demanded by the highest material interests of the country, are not confined to the instrumentalities of commerce nor to the particular kinds of service known or in use at the time when those principles were enunciated, "but they keep pace with the progress of the country and adapt themselves to the new developments of time and circumstances...

Meaning of Public Interest.

Attempts to define public interest date back at least to the time of Lord Chief Justice Hale who said that when property is "affected with a public interest, it ceases to be juris prevati only," language referred to 200 years later by Chief Justice Waite, in a case still looked to as basic authority, who said:

Property does become clothed with a public interest when used in a manner to make it of public consequence and affect the community at large. When, therefore, one devotes his property to a use in which the public has an interest, he, in effect, grants to the public an interest in that use, and must submit to be controlled by the public for the common good, to the extent of the interest he has thus created.

It simplifies definition very little to say that public interest arises when property is devoted to public use, for it remains equally troublesome to determine when the property has been so devoted. Nevertheless, it is the standard rule, declared in many cases. It has been said that it is very difficult to define the word "public" as used in this connection in any simpler language than the word itself.³

¹ State v. Nebraska Telegraph Company, 17 Neb. 126; 52 Am. Rep. 404, 408.

³ Munn v. Illinois, 94 U. S. 113, 126.

^{*} State Public Utilities Commission v. Monarch Refrigeration Company, 267 Ill. 528, 108 N. E. 718.

The Supreme Court of the United States has classified business which falls within the definition as follows:

- 1. Those which are carried on under the authority of a public grant of privileges which either expressly or impliedly imposes the affirmative duty of rendering a public service demanded by any member of the public. Such are the railroads, other common carriers, and public utilities.
- 2. Certain occupations, regarded as exceptional, the public interest attaching to which, recognized from earliest times, has survived the period of arbitrary laws by Parliament or Colonial legislatures for regulating all trades and callings. Such are those of the keepers of inns, cabs, and grist mills.
- 3. Businesses which, though not public at their inception, may be fairly said to have risen to be such and have become subject in consequence to some government regulation. They have come to hold such a peculiar relation to the public that this is superimposed upon them. In the language of the cases, the owner, by devoting his business to the public use, in effect grants the public an interest in that use and subjects himself to public regulation to the extent of that interest although the property continues to belong to its private owner and to be entitled to protection accordingly.

The Supreme Court has also said that the application of the term is best explained by examples.² Adopting that method we find among the businesses so classified grain elevators,³ street railways,⁴ public warehouses,⁵ common carriers,⁶ telephone and telegraph companies,⁷ grist mills,⁸

- 1 Wolff Packing Company v. Industrial Court, 262 U. S. 522, 535.
- ² German Alliance Insurance Company v. Kansas, 233 U.S. 389.
- Steward v. Great Northern Railway, 65 Minn. 517; People v. Budd, 117 N. Y. 1; 15 Am. St. Rep. 460.
- ⁴ Buffalo, etc., Railway Company v. Buffalo, etc., Railway Company, 111 N. Y. 132, 141.
- Nash v. Page, 80 Ky. 539, 44 Am. Rep. 490; Brass v. Stoeser, 153 U. S. 391.
- Georgia Railroad, etc., Company v. Smith, 128 U. S. 174; Railroad Company v. Commissioners, 79 Me. 386, 395.
- ¹ Hackett v. State, 105 Ind. 250; 55 Am. Rep. 201; Central, etc., Company v. Falley, 118 Ind. 194; 10 Am. St. Rep. 114; Western Union Telegraph Company v. Pendleton, 95 Ind. 12; 48 Am. Rep. 692.
- *Burlington v. Beasley, 94 U. S. 310; Olmstead v. Camp. 33 Conn. 532; 89 Am. Dec. 221; State v. Edwards, 86 Me. 105; 41 Am. St. Rep. 528.

hacks,¹ public wharves,² hotels,³ gas companies,⁴ water companies,⁵ boards of trade,⁶ stockyards,⁷ refrigerating companies,⁸ furnishing stock quotations,⁹ coal mining,¹⁰ and insurance.¹¹

Application of Rules to Broadcasting.

Applying the standards laid down by the Supreme Court in Wolff Packing Company v. Industrial Court, supra, it is apparent that the business of broadcasting does not fall within either the first or second classes. It is not "carried on under the authority of a public grant of privileges which either expressly or impliedly imposes the affirmative duty of rendering a public service demanded by any member of the public," for, while the Federal law requires a license. it does not vest in the individual any right to demand service. It does not fall within the instances classed by the common law as exceptional, such as "keepers of inns. cabs, and grist mills." If it comes within the definitions at all, it must be because of its inclusion within the third class, in which the test is whether the owner, by devoting his business to the public use, in effect has granted the public an interest in that use and subjected himself to public regulation to the extent of that interest.

- ¹ Lindsay v. Mayer, 104 Ala. 257, 53 Am. St. Rep. 44.
- ² Chicago, etc., Company v. Garrity, 115 III. 155; Barrington v. Dock Company, 15 Wash. 170.
 - 3 Bostick v. State, 47 Ark. 126, 130.
 - Stale v. Columbus, etc., Company, 34 Oh. St. 572; 32 Am. Rep. 390.
- ^b Spring Valley Water Company v. Schottler, 110 U. S. 347; Wheeler v. Northern, etc., Company, 10 Colo. 582; 3 Am. St. Rep. 603; White v. Canal Company, 22 Colo. 191, 198; American Water Works v. State, 46 Neb. 194; 50 Am. St. Rep. 610.
 - * Stock Exchange v. Board of Trade, 127 Ill. 153; 11 Am. St. Rep. 107.
 - ⁷ Cotting v. Kansas City, etc., Company, 82 Fed. 839.
- *State Pub. Utilities Commission v. Monarch Refrigerator Company, 267 Ill. 528, 108 N. E. 716, 720.
- New York, etc., Stock Exchange v. Board of Trade, 127 Ill. 153, 11 Am. St. Rep. 107.
- ¹⁰ Kansas v. Howat, 109 Kan. 376; 198 Pac. 686; 25 A. L. R. 1210, writ dismissed in 258 U. S. 181.
 - ¹¹ German Alliance Insurance Company v. Kansas, 233 U.S. 389.

Test is Voluntary Dedication by Owner.

Under this language, the fundamental feature in all the cases is that the owner of the property has himself voluntarily permitted such use of his property by the public as to amount to a dedication. Lacking this feature of dedication, no property can be held to have lost its private character and become affected with public interest. The intention to dedicate must exist.

Since public dedication involves the intent of the owner as manifested by practice, it becomes necessary to determine the extent of use which he may permit before a dedication will be presumed. This feature is of particular importance in its application to those broadcasting stations whose facilities are opened to certain classes, but not to the public indiscriminately. The question has received considerable judicial discussion.

The Supreme Court of Illinois has held that a public use

. . . would not include these isolated instances in which a person might select a few individuals with whom he chooses to deal, but would include all these businesses or plants which were intended for and open to the use of all numbers of the public who may require it, to the extent that its capacity will permit of the public use.

The same court in a later case said:

To be public the use must concern a community as distinguished from an individual or any particular number of individuals, but it is not essential that the entire community or people of the state, or any political subdivision thereof, should be benefited or assured in the use or enjoyment thereof. The use may be local or limited. It may be confined to a particular district and still be public.

A somewhat similar case is discussed by Justice Peckham in the Supreme Court of the United States:3

- ¹ State Public Utility Commission v. Monarch Refrigerating Company, 267 Ill. 528, 108 N. E. 716.
- ² State Public Utilities Commission v. Noble Mutual Telephone Company, 268 Ill. 411, 109 N. E. 298, 300. See also State Public Utilities Commission v. Bethany Mutual Telephone Association, 270 Ill. 183; 110 N. E. 334, 335.
- ² Louisville and Nashville Railroad Company v. West Coast Naval Stores Company, 198 U. S. 483, 498.

It is well said by counsel for defendant in their brief that the very nature of a wharf and its inadequacy to meet the demands of every incoming vessel necessitates that its use should be exclusively for those with whom the carrier enters into arrangements. The carrier has a right to select a strong connection instead of a weak one, one that will give assurance of permanent business, instead of one that can offer only occasional shipment. If the free use is incompatible with the certain regular use by the steamer, or lines of steamers, with which the carrier is aligned, it is too clear for further reasoning that such a carrier has the right to accept the latter and thereby exclude the former.

But the capacity of a wharf is necessarily limited, and if the wharf were open to all comers in their turn, there could be no certainty as to any particular vessels being able to reach the wharf at any definite time, and consequently there would be a like uncertainty as to when such vessel would be able to depart with its load. One unexpected so-called tramp vessel might, by arriving a few hours in advance, take possession of all that was left of the wharf for the purpose of loading, and thus prevent the regular steamer, arriving a little later, from coming to the dock, unloading its cargo, and then loading with goods from the railroad. In this way there would be confusion in time and in the possession of the wharf by the different vessels, and its value for the purpose for which it was erected would be greatly reduced, if not wholly destroyed.

In a recent case dealing with the effect of offering service to a limited class, the Supreme Court after saying through Justice Holmes that "the public does not mean everybody all the time," continued:

The rest of the plaintiff's business . . . consists mainly in furnishing automobiles from its central garage on orders, generally by telephone. It asserts the right to refuse the service and no doubt would do so if the pay was uncertain, but it advertises extensively and, we must assume, generally accepts any seemingly solvent customer . . . There is no contract with a third person to serve the public generally. The question whether as to this part of its business it is an agency for public use within the meaning of the statute is more difficult . . . Although I have not been able to free my mind from doubt, the court is of opinion that this part of the business is not to be regarded as a public utility. It is true that all business, and for the matter of that, every life in all its details, has a public aspect, some bearing upon the welfare of the community in which it is passed. But however it may have been in earlier

¹ Terminal Taxicab Company v. District of Columbia, 241 U. S. 252, 255, 256.

THE LAW OF RADIO COMMUNICATION

days as to the common callings, it is assumed in our time that an invitation to the public to buy does not necessarily entail an obligation to sell. It is assumed that an ordinary shop keeper may refuse his wares arbitrarily to a customer whom he dislikes, and although that consideration is not conclusive (German Alliance Insurance Company v. Kansas, 233 U. S. 389, 407), it is assumed that such a calling is not public as the word is used.

In dealing with the control of exchange quotations, a Federal court said that the exchange "has the property right in the quotations which it collects. As such owner, the exchange is under no legal duty to sell its quotations to any particular person nor to all because it sells to some" and in the same case the Supreme Court said that "in furnishing the quotations to one and refusing to furnish them to another, the exchange is but exercising the ordinary right of a private vendor of news or other property."

Even where the property has been devoted to public use for certain purposes, the legislature is without authority to extend the purposes and impose additional public duties not intended by the owner. Upon this phase, it has been said:³

The fact that the property is devoted to a public use on certain terms does not justify the requirement that it shall be devoted to other public purposes, or to the same use on other terms, or the imposition of restrictions that are not reasonably concerned with the proper conduct of the business according to the undertaking which the carrier has expressly or impliedly assumed. If it has held itself out as a carrier of passengers only, it cannot be compelled to carry freight. As a carrier for hire, it cannot be required to carry persons or goods gratuitously. The case would not be altered by the assertion that the public interest demanded such carriage.

Application to Broadcasting.

With the principles thus established, the classification of radio stations in this regard is simplified. The status of the

- 1 Moore v. New York Cotton Exchange, 296 Fed. 61, 69.
- 2 270 U.S. 593.
- ³ Northern Pacific Railway Company v. North Dakota, 236 U. S. 585, 595; Ann. Cas. 1916A, 1, and see Southern Bell Telephone and Telegraph Company v. Town of Calhoun, 287 Fed. 381.

station becomes primarily a question of fact as to whether the owner has permitted public use of his property within the legal meaning of the term.

As has already been pointed out, the owners of many broadcasting stations reserve them absolutely for their own use. They offer their services to no one. Of course other persons than the owner actually speak, play, or sing before the microphone, but they do so not on their own behalf but as his employees, agents, representatives, or guests. Such an owner certainly has not held himself out as engaged in a public undertaking. There has been no dedication nor permissive use by the public or any portion of it. His business has no public character and remains free from any legislative control based upon the right to regulate public utilities.

There remain the broadcasting stations which although not offering their services to the public indiscriminately do provide communication service, for hire, to a limited class or to particular individuals or concerns. They are engaged in what has become a recognized commercial business of increasing extent. They are selling communication service, transmitting messages for other persons for pay. But they reserve the privilege of choosing their customers and of censoring and rejecting at their pleasure any material offered for transmission. They hold themselves out as willing to allow the use of their property to a limited portion of the general public but not to all. To this extent they differ from those stations which offer service to no one.

The owners of these broadcasting stations are in much the same situation as the owner of the wharf discussed in Lewisville and Nashville Railroad Company v. West Coast, etc., Company, supra. To allow the wharf to be used by all members of the public whenever they wished would have seriously impaired its purpose and value, a fact which the Supreme Court took into consideration in determining whether or not the owner intended a public dedication. It is not to be presumed that an owner of property inten-

tionally acts in a manner directly contrary to his interest. The recognition of a general public right to use a broadcasting station would have even more serious consequences than in the case of a wharf.

The Supreme Court points to the fact that the capacity of a wharf is necessarily limited. That is true likewise of the broadcasting station. In one case, the limitation is imposed by size, in the other by time. If one hour of the day were as desirable for broadcasting as any other, the capacity of the station and the number of persons it could accommodate would be mathematically ascertained by dividing the minutes in a day by the number allowed for each program. The number accommodated could of course be increased by cutting down the allowance to each, but unless this process were carried to absurdity, there would still not be enough minutes for everyone. But there are not twenty-four hours available for broadcasting, for during many of them there are no listeners and transmission becomes futile. The broadcasting period has been much extended and daytime communication has become common for limited purposes, yet the evening hours still remain by far the most desirable because used by the greater number of listeners. Radio broadcasting aims distinctly at communication with people in their homes, and hometime generally means nighttime. There is consequently a great difference in the broadcasting value of the hours of the day, running from zero for some to the maximum for others. Naturally, most of those demanding service from the station desire the advantageous evening hours, which adds to the impossibility of accommodating all. A change in this condition seems so improbable as to be negligible. The impossibility of meeting all requests for service militates strongly against a dedication to general public use.

Furthermore, the very character of broadcasting, that which gives it value and interest, forbids indiscriminate transmission. The station lives on the goodwill of its listeners. It succeeds or fails according to whether it

pleases or displeases them, and this depends wholly on the character of its programs. The selection of program material, which means the rejection of the undesirable, has become a profession demanding a high degree of judgment. Each particular piece of material offered must be judged by the test of listener satisfaction, and, in addition, the entire program for each evening must be so balanced as to avoid monotony. It must not be all jazz, or all lecture, or all opera, for the average listener demands variety. broadcaster must give his primary attention to the quality of the communications he transmits, while the commercial telegraph and telephone companies are interested only in the quantity. Neither their profits nor their reputation depends upon the character of their messages. To protect quality, to keep his station on a high standard, the broadcaster must pick and choose among his prospective That is the common practice today. There is no absolute standard upon which to base admission, for there is no positive test of program value. The purpose is the pleasing of the listening public, which as a whole is incapable of expressing its wish. It is collectively voiceless. Its desires vary with age, education, interest, locality, and occupation. The station manager at his peril selects his material so as to please all at some time and as many as possible at all times, but the choice is finally determined by his individual judgment. To impose upon him the obligation of transmitting everything offered would be to destroy the value of his service. To compel him to communicate whatever met his standard would be useless, for his judgment would still control. The essential thought in broadcasting is service to the listener, not the sender, and until that idea meets reversal, there must be program selection.

Certainly no owner by allowing the use of his station only for the sending of programs which meet with his approval, the decision always resting with him, can be said to have dedicated it to public use within the rule of the cases cited. So far as concerns use by the public for transmitting purposes, it is safe to conclude that, unless in the case of some very exceptional station which does not exercise the right of rejection, there has been no public dedication. The stations have not been devoted to public service in the legal sense.

The same conclusion must be reached when we consider the receiving end and the possibility of dedication through service rendered to the listeners. From this viewpoint, there certainly is a public interest, and benefits to the listeners must be given weight by governmental authority in granting broadcasting privileges. We are now, however, considering only whether public use has created legal dedi-There is here, of course, no question of limitations Every station owner strives to reach the greatest on use. number of listeners possible. His attempt is to reach the public as a whole, and the greater the number who accept his services, the greater his satisfaction. Transmission is a privilege granted by favor, but recention is free to all. While the usual public utility gives service to all who pay. broadcasting gives it to all without pay. The service is both gratuitous and voluntary. There is neither obligation nor contractual relation. The common utility is under contractual duty, express or implied, to supply service to its customers. It receives compensation for so doing. The compensation measures the duty, and it may not refuse or avoid it.

Public utility law largely had its inception in the necessity for the regulation of rates, and the whole system exists today only for the control of rates and service. It cannot be extended to embrace a business which receives no compensation and whose service is not obligatory, no matter how large a portion of the public may desire or use it.

The character of broadcasting in its relations to the public was presented to the Fourth National Radio Conference (November, 1925) through a report of the legislative committee, which was adopted, as follows:

We would . . . point out that recognition of the principle of public benefit does not bring the broadcasting stations into the category of recognized public utilities. The owners of broadcasting stations have not dedicated them to public use in a legal sense, and such matters as regulation of rates and other similar features of supervision exercised by governmental bodies over public utilities generally, should still, in the judgment of your committee, remain under the exclusive control of the station owners. In many respects these provisions are inapplicable to broadcasting stations by their very nature; and, in any event, we do not believe the time has come for their imposition.

While the conclusion must be that, excepting the commercial point-to-point stations, radio communication has not reached the public utility stage and perhaps will not, this does not mean that regulation cannot be enforced whenever necessary. If the regulation of rates or service is advisable in the public interest, full power to provide it will be found in the Federal government under the commerce clause, the effect of which would, in any event, impose serious limitations on state authority.

¹ As to authority of Interstate Commerce Commission, see p. 51.

CHAPTER VII

CONFLICTING RIGHTS IN RECEPTION AND TRANSMISSION

The value of a transmitting station depends primarily upon the clearness and intelligibility of its communication. If the signal is not intelligible or is interrupted or disturbed. the worth of the station is impaired to that extent. receiving set operates only to complete the communication. and if its functions cannot be carried on because of extraneous disturbances, its utility is destroyed and the transmission rendered futile. Clarity is the first essential to radio communication, just as it is in wire telephony or telegraphy. The crowding of the ether channels, the struggle of innumerable signals for supremacy, and the intrusion of noises from outside sources cause great annoyance and give rise to conflicting claims for precedence both on the part of the listener and the transmitter. In radio parlance, these disturbances have received the designation of "interference." a term which has come to mean any extraneous communication or sound created in a receiving set to the exclusion or impairment of the one desired. When caused by atmospheric conditions, the disturbing noise is called "static," but whether made by man or by nature, the molestation is equally annoying. It may be intense enough to destroy all reception entirely, may only impair it, or may affect only communications on certain wavelengths. Its source is always electrical, but it may have many varying causes.

Sources of Interference.

A considerable part of radio interference comes from non-radio sources, as has already been pointed out. But 1 See p. 84.

disturbances may come from the transmitting stations themselves, one interfering with the communications of the other. Ordinarily, this occurs when two stations operate on the same frequency or on frequencies not sufficiently separated, considering their radiating powers and relative distances from the listener. If the same frequency is used and each of the stations is within the range of audibility, the receiving set brings in the program of each simultaneously, and the resulting cross-talk is the same as the occasional double conversation heard on a telephone line. the stations are using different frequencies insufficiently separated, or practically the same frequency, when the listener is beyond the range of intelligible audibility, the result may be a whistle-like sound in the receiver, which is called a heterodyne tone. Cross-talk and heterodynes are equally disturbing and give rise to identical legal inquiries. A station may emit harmonics, that is, send out not only the true frequency, but also one or more others simultaneously, thus causing interference on the additional waves. This ordinarily is the result of inadequate equipment or improper operation.

Another form of interference affects reception generally rather than that upon definite wavelengths. It is known as "blanketing." A station of high power may send out so intrinsically strong an emission over a certain area as to drown out all other transmission and make the reception of any other station difficult or impossible on the average receiver. The effect varies with the power of the station, its frequency, and the distance and selection efficiency of the receiving apparatus. The desire to minimize it has caused the tendency on the part of the larger stations to select locations outside of cities, so that any blanketing may affect as few listeners as possible. But the effect always exists, though its amount varies.

Certain classes of receiving sets may cause disturbance. Some regenerative apparatus may be so operated as to radiate energy, becoming in fact a transmitter, its radiation appearing in other receiving sets in the form of disturbing squeals and whistles. Material improvement in radio apparatus and practice is lessening this form of annoyance, but in the past it has been a material element in the sum total of interference.

Sender or Receiver May Complain.

Interference may be considered from the viewpoint of the transmitter whose messages and business are disturbed or the listener whose reception is destroyed or impaired. Either the station owner or the listener might become the complainant against the alleged wrongdoer. There should be no legal difference between the right to send and the right to receive; yet there may be circumstances in special cases which require a differentiation between them.

The right of the state to legislate on the general subject has already been discussed. There is practically nothing in the way of statutory provisions at present. We are now considering only the question of relative rights as between the interferer and the person disturbed, and as to whether legal remedies may be invoked and redress obtained through court action by the party injured.

Both Parties in Lawful Occupation.

Although some legal rules will be found applicable only to certain of the various interference classes, there are general principles which apply to all, and which should first be considered.

The characteristic feature of the situation presents a conflict between individuals, each of whom is carrying on a legitimate activity. It is not a case of an obvious wrong-doer performing an act denounced by law, custom, or good morals to the injury of his neighbor. The persons causing the interference, whether he is engaged in radio communication or is using some electrical device for a non-communication purpose, is in a lawful business within his inherent rights. He is using his own property for his own lawful purposes. The person using his property for radio

communication and suffering the disturbance, whether on the sending or receiving end, is equally within his rights and his acts are legal and proper. There is lawful action on each side, and the question for determination is the relationship between them and whether one must yield if both cannot stand.

Rule of "Sic Utere Tuo."

The situation is not novel in principle. It has arisen before, and has given rise to the maxim sicutere two ut alienum non laedis, (so use your own property as not to injure the rights of another).

Every person shall so use and enjoy his own property, however absolute and unqualified his title, as not to impair the enjoyment of others having an equal right to theirs.² It is the first and most imperative obligation entering into the social compact, although it involves restrictions upon the so-called natural rights of individuals.³ It can never deprive an owner of a reasonable and prudent use of his own property,⁴ nor does it mean that one must always use his own so as never to do injury to his neighbor. Such a rule could not be enforced in civilized society.⁵ The application of the doctrine has been a "source of judicial tribulation in American courts."⁶

The general principle applicable is interestingly discussed in a New York case as follows:7

By becoming a member of civilized society, I am compelled to give up many of my natural rights, but I receive more than a compensation, from the surrender, by every other man, of the same rights, and the security, advantage, and protection which the laws give me. So, too, the general rules that I may have the exclusive and undisturbed use and

¹ Hitchman Coal and Coke Company v. Mitchell, 245 U. S. 229, 254.

² People v. Truckee Lumber Company, 116 Cal. 397, 58 Am. St. Rep. 183, 186.

^{*} Des Moines v. Manhattan Oil Company, 184 N. W. 823, 23 A. L. R.

^{&#}x27;Joyce, "Nuisances," Sec. 32.

⁶ Campbell v. Seaman, 63 N. Y. 568, 20 Am. Rep. 567, 572.

⁶ O'Day v. Showlin, 104 Oh. St. 519, 136 N. E. 289, 25 A. L. R. 980, 984.

⁷ Losee v. Buchanan, 51 N. Y. 476, 10 Am. Rep. 623.

possession of my real estate, and that I must so use my real estate as not to injure my neighbor, are much modified by the exigencies of the social state. We must have factories, machinery, dams, canals, and railroads. They are demanded by the manifold wants of mankind, and lie at the basis of all our civilization. If I have any of these upon my lands, and they are not a nuisance, and are not so managed as to become such, I am not responsible for any damage they accidentally and unavoidably do my neighbor. He receives his compensation for such damage by the general good, in which he shares, and the right which he has to place the same things upon his lands. I may not place or keep a nuisance upon my land to the damage of my neighbor, and I have my compensation for the surrender of this right to use my own as I will by the similar restriction imposed upon my neighbor for my benefit.

It has also been said:1

The protection of property is doubtless one of the great reasons for government. But it is equal protection to all which the law seeks to secure. The rule governing the rights of adjacent landowners in the use of their property seeks an adjustment of conflicting interests through a reconciliation by compromise, each surrendering something of his absolute freedom so that both may live.

Noise Nuisances.

The maxim lies at the foundation of much of the common law of nuisances,² one branch of which covers disturbing noise, and has caused much judicial discussion. Nuisance is difficult to define. It implies an unwarranted, unreasonable, or unlawful use of property to the annoyance, inconvenience, discomfort, or damage of another.³ The basic concept embraces an interference, existing or threatened, with some specific right.⁴ The adverse acts in themselves are not necessarily wrongful, but the consequences are pre-

¹ Booth v. Rome, etc., Railroad Company, 140 N. Y. 267, 37 Am. St. Rep. 552, 561.

² Village of Euclid v. Ambler Realty Company, 47 Sup. Ct. 114.

² Wood, "Nuisances," 2d ed., Sec. 1; Baltimore, etc., Railroad Company v. Fifth Baptist Church, 108 U. S. 317; Heeg v. Licht, 80 N. Y. 579, 36 Am. Rep. 654; Bly v. Edison Electric Illuminating Company, 172 N. Y. 1, 58 L. R. A. 500, 64 N. E. 745, 747; Cooley, "Blackstone," p. 1012.

⁴ Note to Besner v. Central Telephone Company, 230 N. Y. 357, 130 N. E. 577, 23 A. L. R. 1081, 1098.

judicial to the person or property of another.¹ It is an annoyance in the enjoyment of legal rights²—an abuse of man's personal or property rights, not in character a trespass, to the curtailment of his rights in breach of the maxim sic utere tuo.³

Since the interference which affects the radio listener comes to him as sound, the decisions dealing with other noise annoyance become of some interest.

Every property owner is entitled to reasonable quiet in the enjoyment of his premises, and a noise may of itself amount to a nuisance if it is harmful to the health or comfort of ordinary persons.⁴

Obviously the degree of quietness one is entitled to enjoy depends upon attending circumstances. The amount of noise necessary to constitute nuisance depends upon the character of the business, the manner in which it is conducted, its location, and its relation to other property.⁵ "Nuisance by noise is emphatically a question of degree."⁶ As one court said: "It is not necessary that the neighbor be driven from his dwelling; it is enough that his enjoyment of life and property is rendered uncomfortable."⁷

Examples.

The cases dealing with noise nuisances are almost as numerous as the instrumentalities capable of producing sound.

- ¹ 10 Enc. of Laws of Eng. 80.
- ² COOLEY, "Torts," 3d ed., p. 1174.
- * GARRETT, "Nuisances," 3d ed., p. 4.

⁴ Stevens v. Rockport Granite Company, 104 N. E. (Mass.) 371 and note Ann. Cas. 1915B 1059; Hill v. McBurney Oil and Fuel Company, 112 Ga. 788, 52 L. R. A. 398; Powell v. Bentley, etc., Furniture Company, 12 L. R. A. 53; ex parte Foote, 70 Ark. 12, 16; Bishop v. Banks, 33 Conn. 118, 87 Am. Dec. 197; Chicago Milwaukee and Saint Paul Railway Company v. Darke, 148 Ill. 226, 35 N. E. 750; Dittman v. Repp. 50 Md. 516, 33 Am. Rep. 325.

⁶ Reilley v. Curley, 75 N. J. Eq. 57, 71 Atl. 700, 138 Am. St. Rep. 510. House of Refuge v. J. T. Dyer Company, 43 Pa. Sup. Ct. 320.

⁴ Pope v. Peate, 7 Ont. L. R. 207, 208.

Davis v. International Railway Company, 152 N. Y. S. 88, 91.

Loud, profane, and indecent language, a phonograph, the barking and howling of dogs, the braying of a jack, a roaring gas well, ringing bells, and blowing whistles have all been held noise nuisances under the particular facts of each case. The same conclusion has been reached as to a shooting gallery, bowling alleys, noise from emitted steam, and a roller coaster. In a note to a case holding that an injunction would issue to restrain the unnecessary ringing of a heavy factory bell, the following quotation from a Pennsylvania inferior court is given:

A man may do ordinarily what he will with his ground, but he has no such dominion over the streams that pass through or the air that floats over it. The air and the water are so far common property that no one can be entitled to do that which will render them a source of injury, or unfit for the general use.

Cases of vibration disturbance¹² furnish some analogy. The operation of machinery, jarring and shaking buildings to their injury, and to the annoyance of the occupants, have been held nuisances.¹³

- ¹ Mackenzie v. Pauli Company, 207 Mich. 456, 174 N. W. 161, 6 A. L. R. 1305.
- ² Stodder v. Rosen Talking Machine Company, 135 N. E. (Mass.) 251, 22 A. L. R. 1197.
 - ² Herring v. Wilton, 106 Va. 171, 55 S. E. 546, 117 Am. St. Rep. 997.
 - ⁴ Ex parte Foote, 70 Ark. 12, 65 S. W. 706, 91 Am. St. Rep. 63.
- Snyder v. Philadelphia Company, 54 W. Va. 149, 46 S. E. 366, 102 Am. St. Rep. 941.
- Omaha and North Platte Railroad Company v. Janecek, 30 Neb. 276, 27 Am. St. Rep. 399; Davis v. Sawyer, 133 Mass. 289, 43 Am. Rep. 519.
 - ⁷ Grantham v. Gibson, 41 Wash. 125, 83 Pac. 14, 111 Am. St. Rep. 1003.
 - * Mamilton Corporation v. Julian, 130 Md. 397, 101 Atl. 558.
 - Fort Wayne Cooperage Company v. Page, 82 N. E. (Ind.) 83, 84 N. E. 145.
 - 10 Schlucter v. Bellingheimer, 9 Chic. Dec. (reprint) 315.
 - ¹¹ Davis v. Sawyer, 133 Mass. 289, 43 Am. Rep. 519, note 525.
- ¹² Hutcheson v. International, etc., Railroad Company, 119 S. W. (Tex.) 85; Brede v. Minnesota Crushed Stone Company, 173 N. W. 805, 6 A. L. R. 1092; Lake Street Elevated Railway Company v. Brooks, 90 Ill. App. 173; Cremidas v. Fenton, 111 N. E. (Mass.) 855.
- ¹⁹ McKeon v. Sec., 51 N. Y. 300, 10 Am. Rep. 659; Dittman v. Repp, 50 Md. 516, 33 Am. Rep. 325; Forty-second Corporation, etc., v. Oregon Railroad Company, 36 Utah 238, 103 Pac. 243, 140 Am. St. Rep. 819.

General Rule.

In these cases of noise or vibration disturbance there is some difference of decision on facts of substantially the same nature, but they are uniform in the declaration of the legal principles applicable. While they illustrate the dfficulty inhering in the application of the sic utere tuo doctrine to particular facts, they do determine the general rule that unnecessary noises and disturbances unreasonably affecting the health, comfort, and enjoyment of life and property are nuisances.

Application to Noise Caused by Radio.

The doctrine is directly applicable to noise caused by radio apparatus itself. The effect of noise from a loud speaker, for instance, is the same as from a phonograph and it is subject to identical legal rules. Instances of disturbances of this sort have already arisen. Certain types of spark-transmitting apparatus might cause actionable noises of the same legal character. Such instances, however, are not true causes of interference, for they are non-electrical and effect everyone within hearing, not merely those engaged in radio communication.

Application of Rule to Reception Interference.

The decisions as to noise nuisance have application to electrical interference on the receiving rather than the sending end. The listener alone is subject to the annoyance. The underlying theory of the principle is the interference with the "comfort and convenience" of the person affected. It does not rest upon the idea of financial loss, or disturbance of business methods, which would necessarily be the basis for any complaint by the transmitter. The noise, as a nuisance, does not affect him, for he does not hear it.

As to the listener, there is one feature that differentiates his situation from that of the person affected by the ordinary nuisance. The noise reaches him only when, by the use of a receiving set, he deliberately puts himself in a position to hear it, while the person subject to the ordinary noise nuisance cannot escape it unless he abandons his property. It may therefore be argued that the listener has invited the invasion and is solely responsible for his unpleasant situation, for if he does not use his receiver, he suffers no annoyance.

The argument seems unsound. The listener is in the peaceful enjoyment of his home. He is lawfully engaged in a proper occupation, receiving radio communications, for business or pleasure, but in either case making a legitimate and common use of his property. His receiving set is merely an artificial extension of his natural sense of hearing. By its use the scope of audition is extended far beyond natural range, just as the telescope increases the distance of vision. Man without artificial aid can hear the voice of another only within a few hundred yards, while by radio he hears it a thousand miles or more away. He may use artifice to aid hearing just as he may to assist sight. A receiving set bears a relation to his ears similar to that of spectacles or a telescope to his eyes.

He is not in an unusual situation or one not shared by the mass of his fellow citizens, one-fourth of the families of this country being now equipped with and using radio apparatus. The courts, in the cases cited, have said that noise may constitute a nuisance if it causes annoyance, inconvenience, or discomfort. The fact that it does not reach the listener at all times or under all circumstances should not vary the rule, and the defendant in such an action would have a weak defense if his sole plea was that he was not a nuisance always, but only when the listener was operating his apparatus. He would be forced to contend that he could lawfully deprive the listener of that privilege and lawfully destroy the value of his property, real and personal, used for that purpose.

If the person affected by the disturbance could protect himself against it by reasonable skill and precaution or the use of adequate devices, the courts might well require him to do so before intervening on his behalf. Few cases, if any, will arise where interference cannot be corrected at the point of origin by the person who creates it.

The area and character of the disturbance may have an important bearing on the question of nuisance. Mere interference between two stations on a single wavelength would probably not fall in that category. On the other hand, the emission of electrical energy by a non-radio device so as effectually to destroy all radio reception in an entire community, or even all reception for a limited number of individuals, would seem to be of the character of a nuisance.

Assuming that the courts hold that such disturbances are nuisances under common law rules, the rule would be most clearly applicable to the case of a considerable number of listeners in a single community whose reception is destroyed by intrusions caused by electrical devices whose disturbance they are unable to avoid.

Interference Caused by Negligence.

In most instances, though not always, the interference which comes from non-radio sources is caused by the improper installation or unskilled operation of other electrical devices. It is usually preventable and frequently negligent. It may even represent actual financial loss to the one causing it, as in the case of current leaks. This is an element for court consideration. If the offender can obviate the situation and continue to operate, manifestly he should do so.

Some of the cases bearing upon such a situation are given in the note.²

¹ Cumberland Telephone and Telegraph Company v. United Electric Railway Company, 93 Tenn. 492.

¹ North West Telegraph Company v. Twin City Telephone Company, 87 Minn. 495, 95 N. W. 460, 461; Central Pennsylvania Telegraph and Supply Company v. Wilkes-Barre, etc., Railway Company, 11 Pa. C. C. R. 417. See also Birmingham Traction Company v. Southern Bell Telephone and Telegraph Company 24 So. (Ala.) 731; Cumberland Telephone and Telegraph Company v. United Electrical Railway Company 42 Fed. 273; Citizens Telephone Company v. Fort Wayne and Southern Railway Company, 100 N. E. (Ind.) 309; Yamhill County Mutual Telephone Company v. Yamhill Electrical Company, 224 Pac. (Ore. 1924) 1081.

Offender Must Find Proper Methods.

The court will not ordinarily dictate the methods to be taken by the offender to obviate the injury, but will restrain the continuance of the improper acts, leaving means of correction to the defendant. In a case¹ brought against a railway company to prevent electrolysis of water pipes, preventable by the company, the court enjoined the defendant from continuing to injure plaintiff's pipes but left it to the defendant, at its own peril, to find the proper means of prevention, saying:

The reasonableness or propriety of the means to be adopted by electric railroads to prevent or lessen injury to . . . pipes . . . is essentially an administrative inquiry, legislative in its nature . . . administrative when considered and applied by the corporation itself.

These principles seem particularly applicable to the cases of negligent leakage of electric current or insufficient shielding of electrical apparatus, and to some extent to harmonics or "broad wave" radiation from radio stations unnecessarily occupying frequency bands, each being a large contributor to communication interference, and each preventable.

Malicious Interference.

No case has been found in the books of intentional or malicious injury through the use of electric currents. There have been one or two such instances in radio history, but they have not resulted in litigation. It is fair to assume that any such acts would be subject to the usual law of torts and subject the offender to liability under ordinary rules of law as for any other intentional injury.

Interference between Transmitting Stations.

While the law of nuisance may afford solution for some interference problems, it will not solve all. It is available only to the listener, and not universally to him. There remain the important instances of heterodyning and cross-

¹ Peoria Waterworks Company v. Peoria Railway Company, 181 Fed. 990, 1004.

talk caused by two stations deliberately operating on the same frequency or on frequencies insufficiently separated.

Under efficient governmental regulation with adequate authority, the situation described could not arise, for each station would be assigned and compelled to operate upon a separate frequency on which interference would not occur. But no such authority existed under the 1912 law and the regulatory powers granted by the Radio Act of 1927 in this respect have not vet been exerted. Each station has been free to choose its own wavelength, and since there are less than 100 available channels for the use of some 700 stations. duplication and drowning have inevitably resulted. Since prior to 1927 the statutory law was silent and governmental authority powerless, the question arose as to the inherent legal rights of the conflicting stations, as to whether one was superior to the other, and whether the complaints of the public, which is the final sufferer, could be listened to, and as to what, if any, legal remedies might be invoked.

Although the importance of these questions will be greatly minimized by effective Federal action in assigning channels under the 1927 law, they merit some discussion, especially as they will doubtless be argued before the licensing authority when it comes to determine conflicting claims of existing stations.

For present purposes, assume an existing station with an established service, operating upon a definite wavelength, confronted with a new station in its immediate vicinity which has adopted and is operating upon the same wavelength so that the communications of the first become intelligible and its service is destroyed. Whether the result is cross-talk or heterodyne is immaterial in legal effect, for cause and result are the same in each case. Each station holds a Federal license under the 1912 law, each is engaged in a lawful business and giving similar service, and each has an inherent general right to enter upon it. Under these conditions, would the law interfere to protect one as against the other, or would it preserve neutrality, stand

aside, and allow the struggle to continue until the stronger conquered and remained victorious in sole possession of the field?

In the extreme illustration given, the answer may not be difficult, for it must be remembered that just as the newcomer would destroy the efficiency of the earlier, so the other would destroy his. The effects are reciprocal, no greater upon one than the other, for neither can give intelligible reception unless one has a great advantage in relative power. It would seem to follow that the newcomer could not have entered the field with good motive. There could be no immediate bona fide communication design on his part. He must necessarily have intended the destruction of his rival and that must have been his primary purpose. Such operation might be unlawful under Section 5 of the Federal law of 1912, penalizing wilful and malicious interference with other radio communications, and a court of equity would doubtless enjoin such a misdemeanor if it caused injury of the irreparable character here described.

Priority Rights.

For purposes of discussion, it is well to eliminate the element of malice and assume good faith on both sides. It would seem under these circumstances that the only advantage to either station over the other was that one had priority in time, and the question arises as to the applicability of the rule expressed in the maxim qui prior est tempore, potior est jure (priority in time gives superiority in right).

The maxim is ancient and the rule well recognized. In equity it means that "as between persons having only equitable interests, if their interests are in all other respects equal, priority in time gives the better equity," or, as later expressed by the same author:

POMEROY, "Equity Jurisprudence," 4th ed., Sec. 678.

² Ibid., Sec. 682.

Among successive equitable estates or interests where there exists no special claim, advantage, or superiority in any one over the others, the order of time controls. Under these circumstances, the maxim, "Among equal equities the first in order of time prevails," furnishes the rule of decision.

The principle expressed in the maxim has been resorted to by the courts in numerous instances where other rules were wanting and conflicting claims otherwise evenly balanced.

Water-right Analogy.

A situation somewhat similar to that in radio came before the courts of the western states when they were first called upon to determine water rights. There was then a fully developed law of riparian rights recognized in the common law of England and the earlier settled states of this country and still in force there. It gives to all riparian owners on the same stream an equality of right to the use of the water as it naturally flows, and, excepting a reasonable use for certain limited purposes, does not allow an owner to divert water to the material detriment of others. But a custom grew up on the public lands in the western states, based upon an entirely different rule, namely, that he who first appropriated the water and put it to beneficial use was entitled to hold it as against subsequent diversions to his detriment.

The Supreme Court in commenting upon this custom said:

He who first connects his own labor with property thus situated and open to general exploration, does, in natural justice, acquire a better right to its use and enjoyment than others who have not given such labor.¹

The Supreme Court of California said in an early case² that the right of the prior appropriator was firmly fixed by "a universal sense of necessity and propriety" and that, since the right to mine and the right to divert streams from their

Atchision v. Peterson, 20 Wall. 507, 512.

² Irwin v. Phillips, 5 Cal. 140, 146.

natural channels stand upon an equal footing, when they conflict they must be decided by the fact of priority. The court in the last case also remarked that the last comers had the right to mine "throughout an extensive region" and if they selected a stream from which the water had already been diverted, they must take it as they found it, subject to prior rights.

The latter observation might be applicable to the station owner who, with all wavelengths from which to choose, deliberately selects one already in use, upon which he cannot operate without impairing, or perhaps destroying, the service of the prior user.

The rule of prior appropriation has now obtained full recognition in most of the western states, to the exclusion of the common law principle, through judicial decisions and both statutory and constitutional provisions.

Appropriators of water and users of radio channels have some similarity of situation. Both, in a non-technical sense, are using a public medium, one water, the other air or ether. Both are on equal terms with their fellows in all respects excepting the period when use commenced. Each can be differentiated from others in his class only on the basis of priorities in time. It is true that the appropriator of water takes and uses a physical substance. He seizes water which is of common right and appropriates it to exclusive individual use. The operator of radio transmitting apparatus is not actually in the same situation. He has taken no physical property. He has merely adjusted his apparatus so as to send out a certain number of oscillations per second of time, causing external effects of a corresponding character. He has appropriated nothing. What he desires is protection against a neighbor who adjusts his apparatus to the same frequency. Yet this difference need not affect the principle. He and his neighbor cannot use their apparatus simultaneously if so adjusted. In the absence of Federal regulatory action under the 1927 Act, unless they were to be left to determine survival by physical or aerial combat, the common law was the only standard for decision between them, and since they are on a parity in other respects, priority remained as the only legal test. If a recognition of priority accords with "natural justice" and the "universal sense of necessity and propriety," as was said in the water cases, it would seem as applicable here as there.

Trade-mark Analogy.

Another important branch of law in which priority of use controls decision is that governing the right to trade-marks and trade names. Priority was recognized by the courts as the decisive factor before there was statutory law on the subject and the later statutes adopted the same principle. The cases are of interest in the present connection since, unlike the water cases, they do not involve appropriation of an existing thing. There can no more be ownership, in the strict sense, of a mark or a symbol or a name than there can be of a wavelength. Neither has actual existence. Neither can be reduced to possession. The right acquired is to use rather than to own. Conflicts between two individuals each desiring to designate his wares by the same name or mark thus again present the situation now under discussion, equality in all respects except order in time.

The Supreme Court of the United States in considering the basis of trade-mark right said:

The trade-mark may be, and generally is, the adoption of something already in existence as the distinctive symbol of the party using it. At common law the exclusive right to it grows out of its use, and not its mere adoption. By the act of Congress, this exclusive right attaches upon registration. But in neither case does it depend upon novelty, invention, discovery, or any work of the brain. It requires no fancy or imagination, no genius, no laborious thought. It is simply founded on priority of appropriation. We look in vain in the statute for any other qualification or condition.

In Columbia Mill Company v. Alcorn, the Supreme Court repeats the test of priority saying:

¹ The Trade-mark Cases, 100 U.S. 82, 94.

^{2 150} U.S. 460, 463, 464.

The exclusive right to the use of the mark or device claimed as a trademark is founded on priority of appropriation; that is to say, the claimant of the trade-mark must have been the first to use or employ the same on like articles of production.

In its latest case on the subject, holding that the territorial area of actual use measures and limits the extent of the right, the Supreme Court says:

Expressions are found in many of the cases to the effect that the exclusive right to the use of a trade-mark is founded on priority of appropriation . . . In the ordinary case of parties competing under the same mark in the same market, it is correct to say that prior appropriation settles the question.

Analogy of Telephonic Interference.

There is another line of authority which applies the priority rule to the electrical transmission of communications and which is therefore more closely analogous to the case of radio stations using conflicting wavelengths.

It was formerly common practice to make a ground circuit in operating telephone systems. Street railway companies use rails as part of the return circuit. Quantities of electricity have been used by them so great as to cause conduction for an appreciable distance away from the tracks, and electrical current has thus penetrated the lands of private owners, affecting the operation of the delicate instruments making up the telephone system in that area.

An alternating current flowing in one wire will by induction cause a current of generally similar characteristics in a parallel wire wholly unconnected with the first, the extent of which will depend, among other things, upon distance, the length of the parallel, and the magnitude of the current in the first wire. This phenomenon is due to the fact that the energy produces a magnetic and electric field around and on all sides of the wire for a considerable distance from it. The wire is in truth only a "conductor" of or guide for the energy, which is flowing in a river down the roadway and fills it from side to side and beyond as a

¹ Hanover Milling Company v. Metcalf, 240 U.S. 403.

stream fills a river between its banks. If the telephone line is within these fields, voltage and resulting current will be induced upon it.

Induction of this character causes serious impairment to telephone service. It is akin, in quality and effect, to interference with radio communication. While certain technical measures may be taken to minimize it, by either or both of the concerns involved, the situation may be such that it can be completely eliminated only by a change in the location or discontinuance of one of the lines, just as certain radio interference caused by conflicting wavelengths can be eliminated only by abandonment by one station of its air channel. The analogy therefore is fairly close.

The early cases on telephone interference presented novel and difficult questions. The courts met the situations in various ways. Some cases were decided upon principles furnishing no aid to the present discussion, but many are squarely based upon the principle of priority.¹

In Yamhill Tel. Company v. Yamhill Electric Company,² it was alleged that the electric company was constructing a power line which would have the result of causing a loud buzzing sound on the wires and instruments of the telephone company so as to make it impossible to hear or understand the human voice, a situation precisely the same as that arising from the usual type of radio interference. The telephone company was first in the field. The court said:

As to conflicting franchises and operations it is said in effect that, while an electric company occupying the streets under its franchise has no exclusive right of occupancy against a subsequent licensee thereof, yet, as between electric companies exercising similar franchises in the same street or highway, priority of franchise and occupancy carries with it

¹ Paris Electrical, etc., Company v. South West Telephone and Telegraph Company, 27 S. W. (Tex.) 902; Nebraska Telephone Company v. York Gas and Electric Company, 43 N. W. (Neb.) 126; Bell Telephone Company v. Belleville Electric Light Company, 12 Ont. R. (Canadian) 571. See also Western Union Telegraph Company v. Los Angeles Electric Company, 76 Fed. 178, a case of induction interference to a telegraph line.

^{* 224} Pac. (Ore.) 1081, 1082.

superiority of right to the extent that the subsequent licensee is under the duty so to construct its system as not unnecessarily to interfere with the prior licensee in the exercise of its franchise. To this extent a company that first obtains a franchise and occupies a highway thereunder acquires the right not to be substantially molested in its possession, and an injunction may issue, not only against wanton or negligent damage by the holder of the later franchise, but against all interference which is not strictly unavoidable, without regard to the extra cost imposed on the junior licensee. The rights of the first licensee are not exclusive. So long as it is not disturbed in its occupancy, it must submit to such unavoidable inconvenience as may result from a fair and reasonable exercise of the junior licensee's franchise. Damages which are merely a natural incident to, and the direct and immediate result of the junior licensee's operations are not actionable, and such operations will not be enjoined. If the interference is not merely incidental to the lawful operations of the junior licensee, but consists of misconduct in the nature of an abuse of franchise, it may be enjoined, and damages may be recovered for injuries to one electric line resulting from negligence in the maintenance of another. In case the interference may be avoided by the installation of devices or other means, it is the duty of the later company to adopt such means, provided the interference is not merely incidental to the later company's operations.

In a South Dakota case in which it was alleged by a telephone company that its lines became partially charged with electricity from a power line, producing noises and making it impossible for its customers to use their telephones, the court said that "in most jurisdictions where this question has arisen, the courts have held that priority in time carries with it priority in right, even in the absence of a statute expressly recognizing and protecting such right."

Conflicting claims of electrical companies to the exercise of their franchises in the use of streets and highways have arisen in many other instances, and the better right of the senior in time has been generally recognized. The rule has been stated by a text writer² as follows:

¹ Tri-county Mutual Telephone Company v. Bridgewater Electric Power Company, 167 N. W. (S. D.) 501, citing cases.

² JOYCE, "Electrical Law," sec. 617.

Upon the question of interference by the electric light wires of one company with the wires of another electrical company, the following general rule may be stated, being clearly sustained by the weight of authority. As between an electric light company and another electrical company, whether that company be a telegraph, telephone, or an electric light company, prior authority to occupy, or prior occupation of the streets, will not confer upon such company an exclusive right. The right of the prior licensee, however, must not be substantially invaded by the later company. Such subsequent licensee is under the duty to so maintain its wires and lines as not to interfere with the right of the prior occupant of the streets, properly to maintain and operate its lines, and to transact the business it is authorized by its franchise to transact.

In a Federal case involving the power of a city to compel an electric light company to relocate its poles so that the city might install a municipal system, the court made the following statement of the rule in discussing the rights of the company:

When, however, pursuant to the terms of its lawful franchise, it has established its poles and wires and the other instrumentalities in the public street, it may lawfully and properly object to being compelled to remove or relocate them in order that another company, a competitor of later origin and right coming in, may take their place and thereby be enabled to carry on its own intended business. In other words, in this as in many other relations, first in time is first in right, and superiority of right consequent upon being first in time may not be nullified by even necessary requirements of a competitor or other utility later in time and therefore inferior in right.¹

The Supreme Court of Iowa has said that "undoubtedly" the company "first in possession is entitled to be protected from unreasonable interference" and the rule in Pennsylvania has been laid down as follows:²

As between two corporations exercising similar franchises upon the same street, priority carries superiority of right. Equity will adjust the conflicting interest as far as possible, and control both, so that each

¹ Los Angeles Gas and Electric Company v. City of Los Angeles, 241 Fed. 912, affirmed 251 U. S. 32.

² Edison Electric Light and Power Company v. Merchants and Manufacturers Electric Light and Power Company, 200 Pa. 209, 49 Atl. 766, followed in Edison Electric Company v. Citizens' Electric Company, 235 Pa. 492, 84 Atl. 438.

company may exercise its own franchises as fully as is compatible with the necessary exercise of the other's. But if interference and limitation of one or the other are unavoidable, the latter must give way, and the fact that it is under contract with the city for work of a public nature does not alter its position, or give it any claim to preference.

Other cases upholding the rights of the prior occupant are given in the note.1

Acquiring Title to Ice.

Conflicting claims of rights to harvest ice on ponds and other waters not privately owned have occasionally been presented to courts for determination. Here again the rule of "first come first served" has been applied. In Kansas, it has been said that "he who first appropriates and secures the ice . . . owns it." In Maine, where certain ponds are public and the right to cut ice upon them is free to all, a case arose involving a conflict between the right to harvest ice and to use the pond as a highway for travel. The court said:

No one has any absolute property in either. They are derived from a natural right which all have, to enjoy the benefits of the elements, such as air, light, and water, and are common or public rights which belong to the whole community. In the Roman law, they were classified as "imperfect rights." Not that all persons can or do enjoy the boon alike. Much depends upon the first appropriation. One man's possession may exclude others from it. Says Blackstone (2 Com. 14) "These things, as long as they remain in possession, every man has a right to

North West Exchange Company v. Twin City Telegraph Company, 95 N. W. (Minn.) 460. See also Western Union Telegraph Company v. Guernsey and Scudder Light Company, 48 Mo. App. 120; American Telephone Company v. Morgan Telephone Company, 138 Ala. 597, 36 So. 178 (1903); Peoria Waterworks v. Peoria Railway Company, 181 Fed. 990 (1910); Montgomery Light and Water Company v. Citizens' Light, Heat and Power Company, 142 Ala. 462, 36 So. 1026; Consolidated Electric Light Company v. People's Electric Light Company (Ala. 1892), 10 So. 440. But see Philippay v. Pacific Power and Light Company (Wash. 1922), 207 Pac. 957, and Cincinnati Inclined Plane Railway Company v. City and Suburban Telephone Association, 48 Ohio State 390, 27 N. E. 890.

¹ Wood v. Fowler, 26 Kan. 682.

Braslow v. Rockport Ice Company, 77 Me. 100, 104.

⁴ Woodman v. Pittman, 79 Me. 456, 458, 465.

enjoy without disturbance; but if once they escape from his custody or he voluntarily abandons the use of them they return to the common stock, and any man else has an equal right to seize and enjoy them afterwards." They are the subjects of qualified property by occupation (2 Kent's Coms. 348).

The ice fields, after they have been staked and fenced and scraped . . . have so far become the property of the appropriator that an action would lie against one who disturbs his possession.

This is only another instance of the reduction to private ownership of that which was before common to all, the first taker becoming vested with the fruits of his diligence.

Other Instances of Priority Recognition.

The rule in ejectment that he who is in possession of land may hold it against all but the true owner is merely a recognition of a right from prior possession.1 Priority governs the law as to title to wild animals and likewise as to controversies between successive lien holders and attachment and execution creditors. It forms the basis for such statutory enactments as the patent, trade-mark, homestead, mining, and various laws governing entries on the public domain. It is the foundation for the modern system of regulation of public utilities, under which protection against competition is given to the one first in the field furnishing adequate service, and it has been used as the rule of decision between two applicants requesting certificates of public convenience for the same service.² As a principle of general justice, other things being equal, it has both judicial and statutory recognition.

Decision Applying Priority Rule.

The claim of priority right as between broadcasting stations was squarely presented to the Circuit Court of Cook County, Illinois, in the case of *The Tribune Company v. Oak Leaves Broadcasting Station*, *Inc.*, decided in November, 1926. Since the question had never before received

¹ Bradshaw v. Ashley, 180 U.S. 59.

² Re Charles A. McMurray, P. U. R. 1926 D 785.

judicial consideration, Judge Francis S. Wilson, who wrote the opinion, was compelled to break his own trail through the legal wilderness. The court says that the case is "unique in that there is no precedent to guide" and "is novel in its newness," and that therefore "resort must be had to such analogous cases and equitable principles as would be useful." The analogies are found in the cases involving the use of trade names and signs, in the waterright decisions, and in those deciding electrical interference. After reviewing these, Judge Wilson says:

It is the opinion of the court that, under the circumstances as now exist, there is a peculiar necessity existing and that there are such unusual and peculiar circumstances surrounding the question at issue that a court of equity is compelled to recognize rights which have been acquired by reason of the outlay and expenditure of money and the investment of time and that the circumstances and necessities are such, under the circumstances of this case, as will justify a court of equity in taking jurisdiction of the cause.

It is argued that the case is new and novel and uncertain in its final outcome after the hearing of all the proof and that a court of equity should not issue a temporary restraining order because of the uncertainty. We cannot concur in this because in our view of the situation we believe that the equities of the situation are in favor of the complainant on the facts as heretofore shown; particularly in that the complainant has been using said wavelength for a considerable length of time and has built up a large clientage; whereas the defendants are but newly in the field and will not suffer as a result of an injunction in proportion to the damage that would be sustained by the complainant after having spent a much greater length of time in the education of the general radio receiving public to the wavelength in question.

We are of the opinion, further, that under the circumstances in this case, priority of time creates a superiority in right and the fact of priority having been conceded by the answer it would seem to this court that it would be only just that the situation should be preserved in the status in which it was prior to the time that the defendants undertook to operate over or near the wavelength of the complainant.

The court continued an injunction restraining the defendant "from broadcasting over a wavelength sufficiently near to the one used by the complainant as to cause any material interference with the programs or announcements of the complainant over and from its broadcasting station to the radio public within a radius of 100 miles," and while not explicitly so holding, intimated its opinion that the wavelength of the defendant station should be separated from that of plaintiff by at least 50 kilocycles.

Application to Broadcasting Stations.

As applied to broadcasting stations prior to the exertion of regulatory authority under the Radio Act of 1927. it must be concluded that the courts would protect the one first in the field as against interference from a newcomer, in spite of the novelty of the situation. For while the specific condition was new, the general principle was old and well It furnished the only basis for determination. established. It must be remembered that the builder of the last station was not confined to any particular locality nor to any particular wavelength. Under the 1912 law, he might choose both location and channel at his will, having regard only to the conditions of his neighbors. If he finds that wavelengths available for use in a certain locality are all appropriated by others, that is the penalty he pays for being late. He is somewhat like the automobile driver wishing to park on a public street, but finding the places already occupied. While inherently he has the same privilege as everyone else. he may not remove a car already parked in order to put his in its place. He must travel from block to block until he finds an unoccupied spot, even though it be not as convenient for him as the ones appropriated by the more fortunate prior arrivals. Nor may the holder of a ticket for general admission to a place of amusement, who finds all seats taken, oust an occupant so that he may enter. with the individual wishing to engage in radio communica-He has full right to do so. But he must take the situation as he finds it and so adjust himself to the existing condition as not to disturb those whose rights are equal to his and whose status is superior because of priority and possession.

Condition under 1927 Law.

It is difficult to foresee the extent to which the question of relative rights between transmitting stations may arise under the 1927 act. With correct action by the licensing authority, which is to be presumed, interference between stations will be largely done away with by the proper spacing of station frequencies. The necessity for litigation in such cases disappears with the elimination of the cause of action. What interference may remain will have the consent of the licensing authority, and be caused by its action and allocations, for it may be found impossible to eliminate all conflicts, and necessary to allow or even to create some interference in order to eliminate more. If, under its general authority to regulate the entire subject in the public interest, it becomes necessary to assign channels in such a way as inevitably to cause interference, since all may not otherwise be accommodated, it may well be that since each station has an equal governmental grant, neither may assert a right against the other. They remain on a parity.

An Ancient Analogy.

A receiving set is merely a device for decoying to the human ear signals which otherwise would not reach it. An ancient, very distant, but somewhat curious analogy is found in a case¹ where the plaintiff had on his premises a decoy for wild ducks. The defendant, by maliciously shooting on adjoining premises, frightened the ducks so that they avoided the decoy. Chief Justice Holt said:

I am of opinion that this action doth lie. It seems to be new in its instances, but is not new in the reason or principle of it. For, first, this using or making a decoy is lawful; second, this employment of his ground to that use is profitable to the plaintiff, as is the skill and management of that employment. As to the first, every man that hath a property may employ it for his pleasure and profit, as for alluring and procuring decoy ducks to come to his ponds. Then when a man useth his art or his skill to take them, to sell and dispose of for his profit; this is his trade; and he that hinders another in his trade or livelihood is liable to an action for so hindering him.

Keeble v. Hickeringill, 11 East, 574.

Radio disturbance is actually an annoyance, a discomfort to persons of average habits and tastes, making an ordinary and usual use of property. It disturbs property enjoyment. That it is new is of no importance. Time and advancement of the social state demand and create progress. Every new use imposes some restrictions to the freedom of others. Yet applications of existing principles have been made to each in turn.

CHAPTER VIII

BROADCASTING OF COPYRIGHT MATTER

The right of a broadcaster to use matter protected by the statutory copyright has arisen with some frequency. The holders of copyrights have taken the position that the sending out of their productions by radio is a violation of their rights and have demanded royalties as a prerequisite to their consent. Some broadcasters have in the past taken the opposite attitude and without a license or specific authority have proceeded to transmit the copyrighted matter, usually a song. Controversies thus arising have been brought before the Federal courts, and have received divergent treatment.

The general situation has recently been the subject of extended hearings before Congressional committees considering proposed legislation, reference to which will give full information of the position of each side.¹

The Copyright Act as to musical compositions² gives to the author the exclusive right "to perform the copyrighted work publicly for profit . . . and for the purpose of public performance for profit."

In applying this statute to broadcasting it has been necessary for the courts to consider two main points, first, as to whether the broadcasting of a musical composition is a public performance of it, and second as to whether, if a performance, it is "for profit." None of the cases decided involved broadcasting for hire. The broadcaster received no direct compensation and therefore claimed that there was no profit element. The courts differed in their decisions. The discussion in each case is of interest.

¹ Joint Hearings Committees on Patents 69th Congress, first session S. 2328, H. R. 10353.

² 35 Stat. 1075, Sec. 1, as amended by 37 Stat. 489.

The first arose from the unauthorized broadcasting of the copyrighted song "Mother Machree" by a department store in Newark.1 The principal subject discussed was as to whether the broadcast was "for profit," the court apparently assuming that it was, as a fact, a "public performance." The owner of the station took the position that it made no charge and therefore the broadcast was not "for profit." It appeared, however, that the broadcaster was conducting a large department store, was selling radio sets and accessories and that it caused the name of the store, coupled with the statement that it was "one of America's great stores," to be broadcast at frequent intervals each night in connection with its program. The court held that the aim of the broadcasting was the publicity thus received, and the performance was therefore for · profit, the effect of the decision being, although not stated in so many words, that the broadcasting was but a mode of advertising. The final determination was that the song was produced publicly for profit within the meaning of the Copyright Act.

The second case² arose from the same circumstances, the unauthorized broadcasting of a copyrighted musical composition called "Dreamy Melody." The District court declined to follow the Bamberger case. It reached the conclusion that the broadcasting was not a "public performance," holding that the Copyright Act has reference only to performance before an audience corporeally present. It did not discuss the question of profit. Referring to the Bamberger decision, the court said:

While, considered seriatim, this opinion might be said to arrive at a logical conclusion, viz., that the singing was a performance, that it was public in the sense that those could listen who cared to and were equipped with receiving instruments, and that it was for profit because of its advertising value, and therefore every element of a public performance for profit had been disclosed, we have been unable to bring

¹ Witmark and Sons v. Bamberger and Company, 291 Fed. 776.

² Jerome H. Remick and Company v. American Automobile Accessories Company, 298 Fed. 628, 631, 632.

ourself to the conclusion that such broadcasting was within what Congress had in mind when using the language "perform publicly for profit."

Upon the merits, the court determined that there was no public performance, saying:

In order to constitute a public performance in the sense in which we think Congress intended the words, it is absolutely essential that there be an assemblage of persons—an audience congregated for the purpose of hearing that which transpires at the place of amusement.

We simply feel that the rendition of a copyrighted piece of music in the studio of a broadcasting station, where the public are not admitted and cannot come, but where the sound waves are converted into radio frequency waves, and thus transmitted over thousands of miles of space, to be at last reconverted into sound waves in the homes of the owners of receiving sets, is no more a public performance in the studio, within the intent of Congress, than the perforated music roll, which enables the reproduction of copyrighted music by one without musical education, is a copy of such music. A private performance for profit is not within the act, nor is a public performance not for profit. All contemplate an audience which may hear the rendition itself through the transmission of sound waves, and not merely a reproduction of the sound by means of mechanical device and electromagnetic waves in ether.

These cases thus resulted in determinations precisely opposite by courts of equal authority.

The third case, while it involved the same question, the broadcasting of copyright matter, turned on a wholly different feature, the court reaching the conclusion that, so far as the broadcaster was concerned, there was no performance at all. Judge Knox of the Southern District of New York took the view that the performer was the one actually creating the music, in this case an orchestra playing in a hotel a selection entitled "Somebody's Wrong," and that the station owner who broadcast it was not performing anything but merely increasing the audience of the other.

The opinion is of sufficient interest to warrant quotation. Judge Knox said:

¹ Jerome H. Remick and Company v. General Electric Company, 4 Fed. (2d) 160.

. I think it is necessary to ascertain whose performance was broadcast. Was it that of the broadcaster, or was it that of another person, who may have been authorized to perform the copyrighted composition publicly and for profit? If the latter, I do not believe the broadcaster is to be held liable. By means of the radio art he simply made a given performance available to a great number of persons who, but for his efforts, would not hear it. So far as practical results are concerned, the broadcaster of the authorized performance of a copyrighted musical selection does little more than the mechanic who rigs an amplifier or loud speaker in a large auditorium to the end that persons in remote sections of the hall may hear what transpires upon its stage or rostrum. Such broadcasting merely gives the authorized performer a larger audience, and is not to be regarded as a separate and distinct performance of the copyrighted composition upon the part of the broadcaster. When allowance is made for the shrieks, howls, and sibilant noises attributable to static and interference, the possessor of a radio receiving set attuned to the station of the broadcaster of an authorized performance hears only the selection as it is rendered by the performer. The performance is one and the same whether the "listener in" be at the elbow of the leader of the orchestra playing the selection, or at a distance of 1,000 miles.

If a broadcaster procures anunauthorized performance of a copyrighted musical composition to be given, and for his own profit makes the same available to the public served by radio receiving sets attuned to his station, he is, in my judgment, to be regarded as an infringer. It may also be that he becomes a contributory infringer in the event he broadcasts the unauthorized performance by another of a copyrighted musical composition. To this proposition, however, I do not now finally commit myself.

It was contended for the defense that the orchestra was playing the piece under permission from the copyright owner, and on this phase the court remarked that if such was the fact, it would be "impossible to find infringement on the part of the broadcaster."

With these divergent views in the district courts, the question came before the United States Circuit Court of Appeals for the Sixth Circuit¹ by appeal from the Ohio decision above quoted. The case was reversed. The appellate court discussed both the question of whether the

¹ Jerome H. Remick and Company v. American Automobile Accessories Company, 5 Fed. (2d) 411.

broadcasting was a public performance and whether it was "for profit," concluding that it fell within the meaning of the act in both respects. As to the first feature, the court said:

A performance, in our judgment, is no less public because the listeners are unable to communicate with one another, or are not assembled within an inclosure, or gathered together in some open stadium or park or other public place. Nor can a performance, in our judgment, be deemed private because each listener may enjoy it alone in the privacy of his home. Radio broadcasting is intended to and in fact does, reach a very much larger number of the public at the moment of the rendition than any other medium of performance. The artist is consciously addressing a great, though unseen and widely scattered, audience, and is therefore participating in a public performance.

The court answered the contention that the performance was not for profit because no direct compensation was received by saying:

It suffices that the purpose of the performance be for profit, and not eleemosynary; it is against a commercial, as distinguished from a purely philanthropic, public use of another's composition, that the statute is directed. It is immaterial, in our judgment, whether that commercial use be such as to secure direct payment for the performance by each listener, or indirect payment, as by a hat-checking charge, when no admission fee is required, or a general commercial advantage, as by advertising one's name in the expectation and hope of making profits through the sale of one's products, be they radio or other goods.

It is to be noted that the court does not discuss the question whether the broadcaster is really giving a performance, nor is there any reference to the holding of Judge Knox in the General Electric Company case. The court does, however, say, as above quoted, that the "artist" is "participating in a public performance," Judge Knox's opinion being that the artist alone created it. So far as can be judged by the published report of the case, whether the broadcasting was itself a "performance" was not raised.

The case was taken to the Supreme Court of the United States by certiorari, but that court declined to review it.

Judge Knox in his decision suggested that one who broadcasts a copyrighted composition, the production of which is not authorized, may be liable as a contributory infringer, although not himself responsible for the production. This specific question was later passed upon by Judge Thatcher of the same court.2 who adopted the rule as to basic liability declared by the Court of Appeals of the Sixth Circuit, saying that he found no grounds for differing from it. attempt was made to differentiate the case before him because of the fact that the broadcaster did not participate in the unauthorized musical production except by affording others the opportunity to hear it. Judge Thatcher, after remarking that listeners do not perform and therefore do not infringe, held that "the broadcaster is actively engaged in transmitting to the radio audience the original unauthorized production," and that it was therefore a contributory infringer.

The decision of the Circuit Court of Appeals seems to have been generally accepted by the broadcasters as an authoritative statement of the law,³ and, excepting the opinion of Judge Thatcher, there has been no subsequent decision on the subject.

¹269 U. S. 556 Memo. For effect of refusal of certiorari by Supreme Court see United States v. Carver, 260 U. S. 482, 490. Boise Commercial Club v. Oregon Short Line Railroad Company, 260 Fed. 769. Burget v. Robinson, 123 Fed. 262, Anderson v. Moyer, 193 Fed. 499.

² Remick v. General Electric Company, not yet reported.

^{*} For effect of decision of Circuit Court of Appeals on district courts in other districts see Inbrovek v. Hamburg-American Steam Packet Company, 190 Fed 229, 193 Fed. 1019; Fairfield Floral Company v. Bradbury, 87 Fed. 415; Hale v. Hilliker, 109 Fed. 273, 117 Fed. 220, 188 U. S. 739; in re Baird, 154 Fed. 215; Warren Brothers Company v. Evans, 234 Fed. 657, 240 Fed. 696; in re Gibney Tire and Rubber Company, 241 Fed. 879; Vacuum Cleaner Company v. Thompson Manufacturing Company, 258 Fed. 239.

CHAPTER IX

CONTROL OF BROADCAST PROGRAMS

In the early days of radio broadcasting, but little attention was given to program. The listener did not demand much in the way of quality. His thrill came from the hearing of strange call letters and distant voices. He was satisfied merely by the miracle of bringing signals through space and cared little for their substance. Some of that spirit still remains, but as familiarity has taken the place of novelty, most listeners now seek for matter which has some characteristic of value. They demand programs which are in themselves interesting or instructive or entertaining, and this demand has created the new art of program preparation and distribution. Many stations, particularly those in remote districts, have difficulty in finding in their communities sufficient talent of high quality to furnish continuous programs, are compelled to look for outside assistance, and have thus called into being the business of furnishing programs for pay which has already started and promises expansion.

The interconnection of stations by wire or radio, often called chain broadcasting, makes material and events broadcast by one station available generally to others, and simultaneous broadcasting over large areas of the same matter by several stations is a common occurrence. The gathering of matter for broadcasting, the obtaining and paying of artists and speakers, the creation of complete programs and furnishing them to whatever stations, near or far, will pay the price, is a legitimate business of almost certain wide development.

In the beginning, too, the persons who actually appeared before the microphones and created the programs, the singers, speakers, or musicians, gave their services gratis, glad to contribute to the new amusement, or recompensed by the publicity which they received. But that situation likewise has largely changed. Artists are now demanding and receiving the compensation to which their talents entitle them. Performance by radio, whether by song, speech, or orchestra, is on the same plane as though in a theater or other public place. The publicity feature is present in both, varying only in degree, and there would seem no reason for free service in one more than in the other. The selling of artistic talent for radio programs is entirely legitimate and already common.

There is keen competition among stations. There has come to be a station reputation just as there is newspaper reputation. Stations are known by their names or call letters rather than by the names of their owners, just as are newspapers. This reputation depends primarily on the character of the programs transmitted and is a valuable asset. Stations are jealous of it and anxious to preserve it. In addition to the inherent worth of the program material, it depends upon the quality of the transmission, its clearness, and exactness of reproduction as it reaches the listener. If it comes to him distorted by poor rebroadcasting through another station, the reputation of the originator is that much impaired.

The commercial phases of broadcasting have only lately been appreciated but have rapidly developed. It has been remarked that it is particularly dangerous to prophesy regarding the commercial or scientific possibilities of radio communication, whose history began but yesterday; yet it seems fairly safe to predict that the commercial side must finally be looked to for broadcasting support and that, in all its phases, it is bound to increase in importance.

These changes in situation have brought corresponding modifications in attitude. So long as publicity was the only motive, the wider the publicity, the better pleased

¹ Judge Hough in Armstrong v. DeForest, 13 Fed. (2d) 438, 440.

was the advertiser. The originator of the program cared little about what became of it or what was done with it after it left the transmitter, so long as it reached as many people as possible. Extension of his audience was not a harm but a help. Obviously, wherever advertising is the sole motive, that attitude still continues, but there are many instances where it has ceased to exist. The artist who sings in New York tonight may object to the reproduction of his voice in Chicago without his consent. A speaker delivering a lecture in one place may reasonably protest against its reproduction elsewhere to the destruction of his future market. The creator of a well-balanced program may not be willing that others should profit by his efforts. The station owner may resent the purloining of his program by a competitor. Each of these situations presents the question of ownership or control of such material after it has been sent abroad through the ether.

It is possible for any station to take from the air the program broadcast by another and automatically broadcast it to its own listeners practically at the very instant of production. It is feasible to record the matter thus taken on a tape for future reproduction at will, or thus to obtain the artist's song and reproduce it on a phonograph disc. Such action involves the right so to appropriate another's production, or, to state it conversely, the right of the broadcaster who has expended his money to perfect his program, or of the artist who has sold his talent to a particular station alone, to prevent another from taking the product of his efforts and talent, from appropriating what he has created, from exercising in the most modern manner the ancient art of reaping where he has not sown. Like most of the subjects discussed, this is without direct precedent. We are again forced into the field of fundamental principle and analogy.

Original Matter.

Let us consider first the case of the author who has created something of literary or artistic value, written a poem, a story, or a book or composed a song or music. Obviously since he has created what was before non-existent, it is his and he may do with it as he will. Generally speaking, independent of statute there is a legally recognized property interest in intellectual productions, frequently referred to as a "common law copyright," to which he may appeal for protection. Ownership continues until publication, and the author may obtain redress against anyone who endeavors to publish and use it without his consent. He may sell or assign his rights, or license the use of the copyright under such conditions and restrictions as he pleases.

Although the usual remedy against violation of common law copyright is by injunction, the owner has an action at law for damages and exemplary damages may be recovered.

Ownership of such matter has been established by the courts as to poems; 6 encyclopedic articles; 7 dramatic productions; 8 musical compositions; 9 paintings; 10 etchings; 11

- ¹ Caliga v. Inter-Ocean Newspaper Company, 215 U. S. 182, 188; Bobbs-Merrill Company v. Straus, 210 U. S. 339, 346; American Tobacco Company v. Werckmeister, 207 U. S. 284.
- ² Boucicault v. Fox, 3 Fed. Cas. 1691; Universal Film Manufacturing Company v. Copperman, 218 Fed. 577; American Tobacco Company v. Werckmeister, 207 U. S. 284; Maurel v. Smith, 271 Fed. 211, 214; Palmer v. DeWitt, 47 N. Y. 532, 7 Am. Rep. 480, 485.
 - Werckmeister v. American Lithographic Company, 134 Fed. 321, 324.
 - Palmer v. DeWitt, supra; 2 High, "Injunctions," 4th ed., Sec. 988.
 - ⁵ Press Publishing Company v. Monroe, 73 Fed. 196.
 - ⁶ Press Publishing Company v. Monroe, supra.
- ⁷ American Law Book Company v. Chamberlayne, 165 Fed. 313; Jones v. American Law Book Company, 125 App. Div. 519; 109 N. Y. S. 706.
- ⁶ Ferris v. Frohman, 223 U. S. 424, 434; Maxwell v. Goodwin, 93 Fed. 665; Keene v. Kimball, 16 Gray 545, 77 Am. Dec. 426.
- "Mikado," etc. Case, 25 Fed. 183; Carte v. Ford, "Iolanthe" Case, 15 Fed. 439; Thomas v. Lennon, 14 Fed. 849; Stern v. Rosey, 17 App. D. C. 562.
- ¹⁰ Werckmeister v. American Lithographic Company, 134 Fed. 321; American Tobacco Company v. Werckmeister, 207 U. S. 284, Caliga v. Inter-ocean Newspaper Company, 215 U. S. 182; Werckmeister v. Springer Lithographic Company, 63 Fed. 808; Parton v. Prang, 18 Fed. Cas. 10, 784.
 - ¹¹ Prince Albert v. Strange, 2 DeG. & Sm. 652, 64 reprint 293.

letters; architectural plans and drawings; maps and charts; lectures and addresses.

An early case⁵ contains a clear exposition of the common law copyright, the court saying:

The common law rights of authors, as now recognized, existed before the passage of copyright laws, and have not been taken away or impaired by these laws. By Section 9 of the Act of Congress of 1831, no new right is secured or conferred, but simply a remedy for the violation of an existing right in another form . . .

The author of a literary work or composition has, by law, a right to the first publication of it. He has a right to determine whether it shall be published at all, and if published, when, where, by whom, and in what form. This exclusive right is confined to the first publication. When once published, it is dedicated to the public, and the author has not, at common law, any exclusive right to multiply copies of it or to control the subsequent issues of copies by others . . .

The first of the many cases in the Supreme Court on this subject laid down the rule as follows:

That an author, at common law, has a property in his manuscript, and may obtain redress against anyone who deprives him of it, or by improperly obtaining a copy, endeavors to realize a profit by its publication, cannot be doubted . . . The argument that a literary man is as much entitled to the product of his labor as any other member of society cannot be controverted

In a late case Justice Day said:

At common law an author had a property in his manuscript and might have redress against anyone who undertook to realize a profit from its publication without authority of the author.

- ¹ Grigsby v. Breckinridge, 2 Bush. (Ky.) 480, 92 Am. Dec. 509; Denis v. Leclerc, 1 Mart. (La.) 297, 5 Am. Dec. 712; Baker v. Libbie, 210 Mass. 599, 97 N. E. 109; Barrett v. Fish, 72 Vt. 18, 82 Am. St. Rep. 914.
 - ² Wright v. Eisle, 86 App. Div. 356, 83 N. Y. S. 887.
 - ³ Rees v. Peltzer, 75 Ill. 475.
- ⁴ McDearmott Commission Company v. Chicago Board of Trade, 146 Fed. 961, 963, Kecne v. Kimball, 16 Gray (Mass.) 545, 77 Am. Dec. 426, 429; Bartlette v. Crittenden, 2 Fed. Cas. 1082.
- *Palmer v. DeWitt, 47 N. Y. 532; 7 Am. Rep. 480, 481, 482; see also the "Mikado," etc. Case, 25 Fed. 183.
 - Wheaton v. Peters, 8 Pet. 591, 657.
 - Bobbs-Merrill Company v. Straus, 210 U.S. 339, 346.

And again¹ the same judge expressed the rule as follows:

As a result of the decisions of this court certain general propositions may be affirmed. Statutory copyright is not to be confounded with the common law right. At common law the exclusive right to copy existed in the author until he permitted a general publication. Thus, when a book was published in print, the owner's common law right was lost. At common law an author had a property in his manuscript, and might have an action against anyone who undertook to publish it without authority.

From these authorities, it may be concluded that an author has ownership of his work, which continues up to the time of general publication and no longer, except as granted by statute.

The question remains as to whether broadcasting by radio is a general publication by which his common law rights are lost. There are decisions as to non-radio productions which throw some light on the subject.

The Supreme Court,² in dealing with the effect of the publication of a dramatic composition, has stated the rule as follows:

The public representation of a dramatic composition, not printed and published, does not deprive the owner of his common law right, save by operation of statute. At common law, the public performance of the play is not an abandonment of it to the public use . . .

In Palmer v. DeWitt,3 it was said:

Lectures and plays are not, by their public delivery or performance, in the presence of all who choose to attend, so dedicated to the public that they can be printed and published without the author's permission. It does not give to the hearer any title to the manuscript or a copy of it, or a right to the use of a copy. The manuscript and the right of the author therein are still within the protection of the law, the same as if they had never been communicated to the public in any form.

¹ Caliga v. Inter-ocean Newspaper Company, 215 U. S. 182, 188.

² Ferris v. Frohman, 223 U. S. 424, 435, 436; see also American Tobacco Company v. Werckmeister, 207 U. S. 284, 299.

⁴⁷ N. Y. 532; 7 Am. Rep. 480, 488.

And in Keene v. Kimball:1

It should perhaps be added, to avoid misconstruction, that we do not intend in this decision to intimate that there is any right to report, phonographically or otherwise, a lecture or other written discourse, which its author delivers before a public audience, and which he desires again to use in like manner for his own profit, and to publish it without his consent, or to make any use of a copy thus obtained.

Assuming as we must the correctness of the rule announced, it would seem to follow that the author or composer who broadcasts his work does not thereby publish it so as to lose his ownership.2 No distinction in legal effect can be drawn between the production of a drama in a theatre or the delivery of an address in a public hall and the reading or singing of original matter before the microphone. It is simply a different manner of reaching an audience. One is open to all who choose to attend, the other to all who care to listen. In one case the audience is limited only by the capacity of the hall, in the other by the number of receiving sets within range, and hearers in one case may be more or less numerous than in the other as the relationship between these controlling features varies. The incidental circumstances that in one case the audience is physically present while in the other it is absent, unseen, and reached only by artificial aid affords no distinction in law. The principle is the same.3

If this conclusion be correct, the author continues to own his property during and subsequent to the broadcasting, and he may prevent both unauthorized simultaneous broadcasting and subsequent reproduction, or may recover damages for its unauthorized use.

¹ 16 Gray (Mass.) 545; 77 Am. Dec. 426, 429.

For extended discussion of the law of publication, see Werckmeister v. American Lithographic Company, 134 Fed. 321, 324. See also McDearmott Commission Company v. Board of Trade, 146 Fed. 961, 963; Barllette v. Crittenden, 2 Fed. Cas. 981, No. 1082; New Jersey State Dental Society v. Dentacura Company, (N. J. Eq.) 41 Atl. 672, affirmed Id. (N. J. Err. & App.) 43 Atl. 1098; McCarthy and Fisher v. White, 259 Fed. 364.

³ For decisions as to broadcasting as a public performance see chapter VIII.

The station owner, of course, acquires no property right in the matter merely because it is first produced at his station. No one would suggest that the owner of a theater acquires a proprietary interest in a play by furnishing the building in which it is presented. Any proceedings for the prevention of future production must come from the author, not the broadcaster, unless, of course, by contract or assignment from the author he has acquired a right.

Matter Not Original.

Suppose, however, that the performer before the microphone did not originate what he is producing. A great artist, for instance, sings not his own song but an aria from a famous opera. He has no property right in the song itself, its words, or music. Yet the song as he renders it contains much more than mere words and musical notes. He contributes to it a natural ability plus years of study which together constitute what we call talent. His rendition and personality give to it a character which, perhaps, it could receive from no one else in the world, and thus produced, it has an additional and distinctive value. That value he has created, and normally it should be his as much as the literary product of his brain. The question of his right to it is novel but nevertheless important.

The artist may have sold his talent to a broadcaster to be used at a particular station for a definite occasion just as he would do for a concert in an opera house. But another station in another city, having no relations with him, and having paid him nothing, can receive his production and automatically rebroadcast it simultaneously to its own listeners, thus obtaining complete advantage of it at the moment of and during its rendition. It is not a case of copying, but of simultaneous production. There is no direct precedent, and little of any kind by which his rights or the legality of the reproduction can be determined.

¹ But see prohibition of rebroadcasting by Sec. 28, Radio Act of 1927.

Property in the Intangible.

No court has vet held that there is ownership of personality or of sound produced by the voice alone in the absence of originality for the song or speech. Up to this time in the world's history, no direct purloining of voice or talent has been possible, for methods of publication or reproduction have been within the prevention of the speaker or performer. An artist may determine for himself whether or not he will appear before a microphone or the instrument commonly used to record his voice for phonographic repro-He needs no law for his protection against duction. methods within his control. But now that he faces the possibility of direct reproduction by instruments hundreds of miles distant, and far beyond any physical power of prevention which he may exercise, he must meet a condition entirely new. The law must give him protection if he is to have any, for he cannot protect himself.

There is a line of authority dealing with new types of business activity whose subject matter at the time of the decisions was not within standards of ownership under declared rules of law which have a bearing upon the right of the artist and of the broadcaster.

One illustration is found in the collection of stock quotations and their mechanical distribution by a "ticker." Such matter is not subject to the rule of either common law or statutory copyright. The material itself has no element of originality. No ownership of such material had been judicially recognized. Yet the courts have established a property right in it. One such case arose from the unauthorized taking and distribution by a ticker company of matter gathered and sent out by another, the defense being that the appearance of the first printed tape was such a publication as, within the meaning of the law, dedicated its contents to the public and deprived the owner of any further monopoly.

¹ National Telegraph News Company v. Western Union Telegraph Company, 119 Fed. 294, 299.

Judge Grosscup, who wrote the opinion for the Federal Court of Appeals, holding that appellee's rights were not lost upon publication, used the following language:

Property, even as distinguished from property in intellectual production, is not, in its modern sense, confined to that which may be touched by the hand, or seen by the eye. What is called tangible property has come to be, in most great enterprises, but the embodiment, physically, of an underlying life—a life that, in its contribution to success, is immeasurably more effective than the mere physical embodiment . . . It is needless to say that to every ingredient of property thus made up—the intangible as well as the tangible, that which is discernible to mind only. as well as that susceptible to physical touch—equity extends appropriate protection. Otherwise courts of equity would be unequal to their supposed great purposes; and every day, as business life grows more complicated, such inadequacy would be increasingly felt . . . Here, as elsewhere, the eve of equity jurisdiction seeks out results and though the immediate thing to be acted upon by the injunction is not itself, alone considered, property, it is enough that the act complained of will result, even though somewhat remotely, in injury to property.

Is service like this to be outlawed? Is the enterprise of the great news agencies, or the independent enterprise of the great newspapers, or of the great telegraph and cable lines, to be denied appeal to the courts, against the inroads of the parasite, for no other reason than that the law, fashioned hitherto to fit the relations of authors and the public, cannot be made to fit the relations of the public and this dissimilar class of servants? Are we to fail our plain duty for mere lack of precedent? We choose, rather, to make precedent—one from which is eliminated as immaterial, the law grown up around authorship—and we see no better way to start this precedent upon a career, than by affirming the order appealed from.

The Supreme Court, in dealing with a similar condition, said:

In the first place, apart from special objections, the plaintiff's collection of quotations is entitled to the protection of the law. It stands like a trade secret. The plaintiff has the right to keep the work which it has done, or paid for doing, to itself. The fact that others might do similar work, if they might, does not authorize them to steal the plaintiff's . . . The plaintiff does not lose its rights by communicating the result to

¹ Board of Trade v. Christie Grain and Stock Company, 198 U. S. 236, 250, and see Moore v. New York Cotton Exchange, 270 U. S. 593.

persons, even if many, in confidential relations to itself, under a contract not to make it public . . .

The situation in the foregoing case is distinguished from broadcasting by the fact that the information was confidential and furnished only to persons under contractual relations; yet it has some value as a recognition of the right of such a business to legal protection.

In an early Federal case¹ in which a similar situation had arisen, it was said:

Granting that the right to these quotations is a property right, then it cannot be denied that complainant is greatly damaged by the broadcast scattering of those quotations by purloiners, who, by reason of having to pay nothing for these quotations so stealthily obtained by them, can obviously render complanant's right of property . . . valueless.

In these cases the quotations were obtained stealthily or wrongfully. In a later case, however, very similar to the Christie case, in which the defense was offered that the quotations were not obtained surreptitiously, the Supreme Court said:

In the Christie case the quotations were gotten and published "in some way not disclosed" but, it was said, as the defendants did not get them from the telegraph companies authorized to distribute them, had declined to sign contracts, satisfactory to the plaintiff (Board of Trade), and denied the plaintiff's rights altogether, it was reasonable conclusion that they got, and intended to get, their knowledge in a way which was wrongful. This, however, was not said to limit the plaintiff's right but to express a violation of it.

In addition to the ticker cases the courts have been called upon to determine controversies growing out of the unauthorized appropriation of "news," the defense usually being that there can be no ownership in mere information which plainly lacks substance or materiality. That contention has been brushed aside by the equity courts and protection extended.

¹ Cleveland Telephone Company v. Stone, 105 Fed. 794, 795.

¹ Hunt v. New York Cotton Exchange, 205 U.S. 322, 337, 338.

In one such case¹ it was said:

The information is not visible, tangible property, but there is a valuable right of property in it which the courts ought to protect in every reasonable way against those seeking to obtain it from the owner without right, to his damage. What the plaintiff has when the defendant seeks to obtain it from him is the possession of valuable information. This early possession is valuable in itself. The plaintiff has it and the defendant does not have it. If the defendant can obtain it legitimately, he becomes the owner of the same kind of property, and the two may become competitors in the market as vendors to those who are willing to pay for it. But if the defendant surreptitiously and against the plaintiff's will takes from the plaintiff and appropriates the form of expression which is the symbol of the plaintiff's possession, and thus, by direct attack, as it were, divides the plaintiff's right of property.

In a later Federal case, a press organization which gathered news from all over the world for transmission to its members sought to enjoin a news service, a competing organization, from distributing such news to its member newspapers. The court said:²

Whether there is or can be any property in facts per se, any more than there is in ideas or mental concepts, is a metaphysical query that can be laid aside; for there is no doubt, either on reason or authority, that there is a property right in news capable of and entitled to legal protection . . .

Since (to summarize the matter) any bodily taking for sale of plaintiff's news, without other labor than the perception thereof before the reasonable reward of industry is secured as above indicated, is an unlawful invasion of property rights, and any sale thereof in competition with plaintiff under pretense of individual gathering thereof is a tort of the nature of unfair competition, the plaintiff's motion for injunction should have been granted substantially as made.

Unfair Competition.

The Supreme Court³ on review of this controversy decided it on the principle of "unfair competition," the Court saying:

¹ F. W. Dodge Company v. Construction Information Company, 183 Mass., 62: 66 N. E. 204.

Associated Press v. International News Service, 245 Fed. 244, 248, 253.

² 248 U. S. 215, 236, 240.

Although we may and do assume that neither party has any remaining property interest as against the public in uncopyrighted news matter after the moment of its first publication, it by no means follows that there is no remaining property interest in it as between themselves. For, to both of them alike, news matter, however little susceptible of ownership or dominion in the absolute sense, is stock in trade, to be gathered at the cost of enterprise, organization, skill, labor, and money, and to be distributed and sold to those who will pay money for it, as for any other merchandise. Regarding the news, therefore, as but the material out of which both parties are seeking to make profits at the same time and in the same field, we hardly can fail to recognize that for this purpose, and as between them, it must be regarded as quasi property, irrespective of the rights of either as against the public . . .

It is no answer to say that complainant spends its money for that which is too fugitive or evanescent to be the subject of property. That might, and for the purpose of the discussion we are assuming that it would, furnish an answer in a common law controversy. But in a court of equity, where the question is one of unfair competition, if that which complainant has acquired fairly at substantial cost may be sold fairly at substantial profit, a competitor who is misappropriating it for the purpose of disposing of it to his own profit and to the disadvantage of complainant cannot be heard to say that it is too fugitive or evanescent to be regarded as property. It has all the attributes of property necessary for determining that a misappropriation of it by a competitor is unfair competition because contrary to good conscience.

It has been said that an artist who sings for the phonograph has means within his control of preventing a direct reproduction of his voice. A Federal case¹ dealing with indirect purloining of voice as reproduced on a phonograph is enlightening. One of the defenses made was that the singers whose voices were reproduced were necessary parties to the litigation since their royalties or profits were affected. Their position was quite similar to that of one whose voice broadcast by radio is given unauthorized phonographic recordation and reproduction. The court, although holding that they were not necessary parties to that litigation, recognized that they had a financial interest saying:

It may be remarked that the defendant has answered, claiming that each of these singers is a necessary party to this suit, inasmuch as their 'Fonotipia, Ltd., v. Bradley, 171 Fed. 951, 954, 963.

contracts are affected; but it need only be said that they are neither necessary nor indispensable parties, for the reason that their contracts are entirely dependent upon sales, and they are interested in the present questions only in the sense that their profits would be greater or less as sales increase or diminish.

The relief asked in this case would protect those who have already sung or played compositions having a pecuniary value, because of their musical excellence, and also the persons who have invested capital and labor in putting a valuable product upon the market. The education of the public by the dissemination of good music is an object worthy of protection, and it is apparent that such results could not be attained if the production of the original records was stopped by the wrongful taking of both product and profit by anyone who could produce sound discs free from the expense of obtaining the original record.

In discussing the merits of the litigation, the court said:

The jurisdiction of a court of equity has always been invoked to prevent the continuance of acts of injury to property and to personal rights generally, where the law had not provided a specific legal remedy, and it would seem that the appropriation of what has come to be recognized as property rights or incorporeal interests in material objects, out of which pecuniary profits can fairly be secured may properly, in certain kinds of cases, be protected by legislation, but such intangible or abstract property rights would seem to have claims upon the protection of equity, where the ground for legislation is uncertain or difficult of determination, and where the principles of equity plainly apply.

There are other illustrations of the extent to which the courts go in extending protection against unfair competition. In one case a moving picture theater had a contract with a distributor for a certain number of "first-run" pictures, that is, the right of exhibiting such pictures for the first time in a city or vicinity. The distributor was about to furnish a rival theater with some of the pictures included in the contract. The court, after reviewing and quoting at length from the decision in *International News Service v. Associated Press, supra*, said:

Its first-run privilege was of great value in the business of the kind in which instant parties are and were engaged . . . Select Pictures Corporation, having granted to complainant the exclusive privilege of ¹ Montgomery Enterprises v. Empire Theatre Company, 204, Ala. 566, 86 So. 880, 19 A. L. R. 987, 999.

showing said picture at its theater in Montgomery, Alabama, before its exhibition at other theaters in said city, was a valuable right secured by the latter under the contract, and other theaters in Montgomery could not legally exhibit the same in disregard of complainant's contract rights of first run . . . This was beyond the rights of the law of competition.

Other Illustrations.

In Turner v. Robinson, the painter of a picture exhibited it publicly. The defendant, who saw the picture, devised a tableau at another place in close imitation of the picture, took a photograph of the tableau, and then published reproductions of this photograph under the same title as that of the painting. He was restrained from doing this upon the ground of unfair competition. It should be noticed that he did not take a photograph of the picture itself but photographed a tableau in imitation of the picture and at another place. Nevertheless, he was not permitted to sell these photographs. Furthermore, although the owner of the picture granted the right to see it, this did not justify the making of an imitation of it.

In Oertel v. Wood,² an artist exhibited his picture, "The Rock of Ages" and the defendant took a photograph and began the sale of photographic reproductions. He was restrained from doing this. In effect, the court held that the right to look at the picture did not include the right to photograph it. The same principle appears applicable to broadcasting. The right to listen is not a right to reproduce.

In both of the above cases, the exhibition by the artist was free, and therefore, there was no contractual relation between the artists and the defendants.

Summary.

Whatever may be argued as to the legal rights to take from the ether, and appropriate to one's own unauthorized use, matter the existence of which is due to another, few

^{1 10} Irish Chancery Reports, 121, 510.

² 40 How. Pr., 10 (N. Y. S. C., 1870).

would contend that such an act is within accepted standards of fairness or good morals. It is but a new example of the appropriation of the result of another's skill or labor, the obtaining without effort or expense of that which required both in its creation. 1 As is shown by the cases cited, the situation is not novel in principle. While the decisions are not wholly in harmony as to the legal grounds for their determinations, they are in accord as to results. them the courts dealt with new methods of invasion of underlying moral rights in an attempt to get something for nothing, and they had no trouble in determining the fundamental question of right and wrong between the parties. The difficulty arose in the endeavor to find a legal basis for the moral right on some accepted principle of law which would warrant the decision which justice required. A determination on the basis of property right met with the obstacle that there can be no ownership, in a legal sense, of the intangible, the temporary, and the evanescent. Yet the circuit courts of appeals in two districts upheld the property principle, one saying affirmatively that it preferred to make precedent rather than to fail in its plain duty. The Supreme Court of Massachusetts took a similar view. The Supreme Court of the United States has seemed to lean to a determination under the doctrine of unfair competition, itself a very modern one in its application by courts of equity, but at the same time it declares that as between the interested parties there is at least a "quasi property" in the material, although as against the public no property interest remains after publication. Whether on the theory of property rights or of unfair competition no great extension in princi-

¹ The attitude of radio representatives on this feature is shown in a resolution adopted at the Radio Conference held at Washington, D. C., in March, 1923. "That simultaneous rebroadcasting shall be permitted only on a broadcasting wave frequency and with the authorization of the original broadcaster and of the Department of Commerce" Department of Commerce, Radio Service Bulletin 72, p. 12. For prohibition of rebroadcasting without consent, see Radio Act of 1927, Sec. 28.

ple is necessary to make the same rules applicable to the unauthorized use of broadcast material.

In addition to the common fact that in all these cases the arm of the court of equity was extended to protect incorporeal rights against unauthorized appropriation, the arguments adopted are at least strongly persuasive that the same attitude would be taken toward the purloining of radio programs whether from the artist or the producer.

CHAPTER X

LIBEL AND SLANDER

Radio communication in general, and broadcasting in particular, furnishes a new implement for the ancient art of defamation. As a medium of publicity, it classes with the newspapers and, like them, may be used for good or ill. If improperly used, it is a powerful weapon for character destruction. From the natural speech, through writing, to radio, there are progressive steps in defamatory possibilities, for while slander speaks with but a single tongue, the printing press multiplies the message to a thousand eyes and radio may carry the calumny to a million ears.

It is to the credit of the broadcasters that matter transmitted by the new agency has been kept so clean that up to this time apparently only one case of alleged defamation by radio has reached the courts. Yet the mere fact that the agency exists and is susceptible of such use means that sooner or later men will so use it. The courts will again be confronted with the necessity of determining novel questions, for while the legal principles underlying liabilities and rights of recovery in case of defamation are well established, their application to the new method is by no means simple.

Defamation May Be Either Libel or Slander.

Actionable defamation has been legally divided into libel and slander, according to whether the publication is by writing or by word of mouth. The line of differentiation being usually clear, few twilight cases have arisen and it is generally a simple matter to determine to which division any given defamation belongs. It is sometimes necessary to make the decision, for while the underlying principles

of the two wrongs are the same, they vary in important particulars. In most states, for instance, a libel subjects the offender to the penalties of the criminal laws, while a slander does not. So too there are differences in civil liability, damages being recoverable in many cases of libel though the same words or ally uttered would not be actionable. Since the underlying theory in each case is the right of the individual to protect his reputation, which may in fact be injured as greatly in the one case as in the other, it is difficult to give adequate reasons for the technical distinctions between the two actions, and courts have freely criticized their artificiality; yet the differences remain permanently imbedded in the laws of most of the states and must be taken into consideration in discussing defamation by radio.

Broadcasting Non-written Matter is Slander.

Radio broadcasting is entirely oral as between the sender and the receiver. Whether it be song, prose, or verse, the broadcaster transmits only the spoken word. He conveys the matter by sound only. If that is all that appears in the actual case, obviously the defamation if any, constitutes slander, for the very fundamental element in libel, a writing of some sort, is entirely absent.

Written Matter May Be Broadcast.

But not all broadcasting presents so simple a case. In much of it there is a combination of speech and writing. The person before the microphone may read, from a newspaper, a book, or a magazine, matter to which he contributed no authorship, so that he is merely giving additional publicity to a libel originated by someone else. Or the speaker may read from his own manuscript which he has prepared in advance, a very common practice. In all such cases, the elements of libel and slander are both present, and it may become essential to determine which law governs.

Oral Publication of Written Libel.

The underlying question is not a new one. It has several times been presented to the courts, and the cases are uniform in holding that the oral reading of written libelous material is itself a libel.

A text writer discussing this question has said:

It may be that, after composing and writing it, the defendant reads it aloud to some third person, who listens to the words and understands them; in this case the same act may be both the uttering of a slander and the publication of a libel.

One court has said:2

In the case de libellis formosis, 5 Rep. 125, it is said that publication may be "verbis aut cantilenis, as when the libel is maliciously repeated or sung in the presence of others." In Lamb's case, 9 Rep. 59, it is said that if one who has read a libel or heard it read repeats it, or any part of it, in the hearing of others, that is a publication. In Bac. Abr. Libel B. this is laid down as undisputed law.

Other cases to the same effect are given in the note.3

The cases above cited all involve the oral reading of defamatory letters and are directly in point on the present discussion. A similar situation has arisen in the transmission of telegrams. The message is written out and handed to the telegraph company, which proceeds to reproduce it in audible dots and dashes and thus transmit it.

In a case involving liability for so transmitting a libelous communication, the company contended that since the transmission was not by writing, it could not be libelous, but the court held to the contrary, saying:

The fact affirmatively appears . . . that the message was transmitted over the wires by sound, and the point is now made that the mode

ODGERS, "Libel and Slander," 4th ed., p. 151.

Adams v. Lawson, 17 Grattan (Va.) 251 (1867).

^{*}Van Cleef v. Laurence, 2 N. Y. C. Hall Recorder, 41 (1817); Johnson v. Hudson and Morgan, 7 Ad. & E. (Eng.) 233 (1836); M'Coombs v. Tuttle, 5 Blackf. (Ind.) 431 (1840); Snyder v. Andrews, 6 Barb. (N. Y.) 43 (1849): Beardsley v. Tappan, 2 Fed. Cas. No. 1188a.

⁴ Peterson v. Western Union Telegraph Company, 74 N. W. (Minn.) 1022. See also 20 Columbia Law Review, 30; 369.

of communication was oral, and not written, and therefore there was no publication of a libel; the distinction between slander and libel being that the former is oral defamation by spoken words, while the latter consists of a publication by writing, printing, pictures, or other durable mode . . .

Whether the means employed by the operator at New Ulm in dictating or communicating the contents of the message to the operator in St. Paul consisted of sounds representing letters, or dots or dashes representing the same thing, can make no difference. In either case, the purpose and result would be the same, viz., the transmission and copying in written form the contents of the written message in the hands of the operator in New Ulm.

This case is direct authority as to the liability of a radio telegraph company, and very persuasive as to that of a broadcasting station.

Statutory Definitions.

In many states, the distinction between libel and slander is fixed by statutory definition, especially as to criminal liability. Even under such statutes, the proper classification of matter transmitted by radio is not always easy of determination.¹

Application of Rule to Radio Communication.

While the cases holding that reading a libelous letter constitutes the publication of a libel are few and comparatively old, there seems to be nothing later or to the contrary. As precedents they stand as the law on the subject. If the courts follow them, the broadcasting of defamatory matter which has been put in writing will be held to be libel rather than slander, with all the more serious consequences involved in that wrong.

¹ The Washington statute, for instance, may be construed as declaring all radio defamation to be libel rather than slander. It provides (Rom. & Bal. Code, Secs. 2424, 2426): "Every malicious publication by writing, printing, picture, effigy, sign, or otherwise than by mere speech, which shall tend... to injure any person, corporation, or association of persons in his or their business or occupation, shall be a libel... Any method by which matter charged as libelous may be communicated to another shall be deemed a publication thereof."

That these cases will be universally followed is, however, not certain. On principle, the facts seem distinguishable. In either libel or slander the harm to the defamed person is in the effect which the statement has upon the minds of those who hear or read it. The law has laid down the arbitrary rule, which may not be true in fact, that this effect is stronger if the matter is written than if merely spoken, based partly upon the form, which is permanent in one case and momentary in the other, and partly perhaps on the idea that man believes what he reads more readily than what he hears. In all the cases cited of oral reading of letters, the hearer was advised that what was being repeated to him was in written form. He heard the defamatory statement and knew that it had been made in writing. The effect upon his mind was precisely the same as though he read it himself. The courts therefore had no difficulty in determining that there was an actual communication or publication of the writing itself.

In broadcasting, however, the situation may be precisely the opposite. If the speaker merely reads from manuscript which he himself has prepared, or from a book or written matter, irrespective of authorship, making no statement that his matter is in permanent form, nor reference from which that fact may be inferred, he is merely using written matter as a guide to oral statement, in lieu of memory. While he gives publicity to statements identical with those in the writing, it is stretching language to say that he has published the writing itself. Whether read or spoken extemporaneously, the operation and effect are the same. The audience receives precisely the same impression in each case. The manuscript is not itself circulated. It may be in more or less permanent form, but it is not delivered to the listeners nor seen by them, nor intended to be, nor is its existence known to them. would seem that no importance whatever should be attached to it. Common sense would dictate that the words transmitted by radio under such circumstances should be classed as slander, not libel, and it may well be that the courts will consider that the former decisions are inapplicable to this situation and will decline to follow them. Many of the rules of the law of libel are illogical and arbitrary. No necessity exists to carry confusion one step further to the demoralization of the latest method of thought transmission.

Joint Liability of Speaker and Broadcaster.

In the usual radio transmission there are two parties, the speaker and the broadcaster. If the matter transmitted be defamatory, two must cooperate to create the harm. No other situation parallels it. The utterance of the speaker does not leave the studio until transmitted by the operations of the station owner. They must act in concert to complete the publication. It becomes necessary to consider their respective liabilities.

The general rule as to defamation is that all persons are liable in law who are liable in fact.¹ It is said that if two or more persons utter a slander at the same time, each gives rise to separate proceedings, slander being an individual act in which there can be no joint commission. But if the utterance is single, anyone who instigated its speaking or by conspiracy caused it to be uttered is liable,² as are all who assist in the publication,³ and all aiders and abetors.⁴ All who cooperate in creating and publishing it, the author and the one who gives it circulation, are responsible for it as joint tort feasors.⁵

Liability of Speaker.

The one who utters the defamation before the microphone is of course directly liable for it. He may not escape by asserting that he spoke in the privacy of a studio and would

¹ Cooley, on "Torts," 3d ed., p. 209; Smith v. Agee, 178 Ala. 627, 59 So. 647, Ann. Cas. 1915 B, 129.

³ Bebout v. Pense. 150 N. W. (S. D.) 289; Page v. Citizens' Banking Company, 111 Ga. 73, 78 Am. St. Rep. 144, 153.

^{*1} STREET, "Foundations of Legal Liability," p. 298.

⁴ Tucker v. Eatough, 120 S. E. 57, 186 N. C. 504.

⁶ Miller v. Butler, 6 Cush. (Mass.) 71, 52 Am. Dec. 768.

not have been heard but for the act of the broadcaster who gave his utterance publicity. His purpose was to reach an audience and he is held to the natural consequence of his acts. He is in the same position as the author of a libelous article who obtains its publication in a newspaper or magazine. He is the moving cause and is primarily liable.

Liability of Broadcaster.

The newspaper cases as to libel illustrate the individual liability of the publisher. The proprietor is held in law for all defamatory matter. Also the managing editor,² the printer, and the publisher are liable to be sued, either separately or together.³ The liability is absolute. If the publication is libelous per se, the motive is immaterial.⁴ The publisher may have made an honest mistake; yet he remains liable.⁵ The law looks to the tendency and consequences of the publication and not to the intention of the publisher.⁶ He may be ignorant of the author's intention to libel or of the libelous character of the published matter or of the matter itself; yet he remains responsible in law.⁷ Justice Holmes⁸ states the rule as follows:

If the publication was libelous, the defendant took the risk, as was said of such matters by Lord Mansfield, "Whatever a man publishes, he publishes at his peril." . . . The reason is plain. A libel is harmful on its face. If a man sees fit to publish manifestly hurtful statements concerning an individual, . . . the usual principles of tort will make him liable, if the statements are false . . .

Application of Absolute Rule to Broadcasters.

If this rule is to be applied to the owner of a broadcasting station, his liability is absolute. Having chosen to broad-

- ¹ Hedgpeth v. Coleman, 183 N. C. 309, 111 S. E. 517, 24 A. L. R. 232.
- 2 NEWELL, "Libel and Slander," 3d ed., p. 461.
- ODGERS, on "Libel and Slander," 4th ed., p. 164.
- 425 Cvc. 371.
- Note to Laudati v. Stea, 26 A. L. R. 457.
- * Hatfield v. Gazette Printing Company, 103 Kan. 513, 175 Pac. 382, 3 A. L. R. 1276.
 - Note to Corrigan v. Bobbs-Merrill Company, 10 A. L. R. 672.
 - * Peck v. Tribune Company, 214 U. S. 185.

cast, he must assume the consequences. Yet there are differences between his situation and that of the newspaper proprietor which makes the absolute rule harsh and unfair when applied to him. For while the newspaper owner by the exercise of due care may prevent his publication from being used as an agency for libel, the broadcaster in many cases cannot. Matter for newspaper publication is necessarily prepared in advance. The editors scan it for news value, consider its propriety, and determine whether or not it shall be accepted. There is time and opportunity for consideration and determination, and the matter itself is plainly presented. The power to eliminate defamatory statements is in the owner's hands, or under the control of employees for whom he is responsible. Compelling him to publish at his own risk is therefore not unjust or unfair.

The broadcaster, on the other hand, has no such opportunity of complete inspection and protection. There is no interval between the speaking of the word into the microphone and its transmission to the listening public. The station owner has no chance to consider whether he will publish it, for speech and transmission are simultaneous. He may use the highest discretion in the selection of speakers of spotless reputation for fair speaking, and his trust may be misplaced. He may require the submission of manuscript in advance, find it free from calumny, and so pass it and the speaker may depart from it. He may have his monitor listen to each word spoken through the microphone; yet the defamation may come so suddenly that its escape cannot be prevented. To impose absolute liability under such circumstances is to penalize in the absence of blameworthiness-not the usual principle in the law of torts.

Rule in Telegraph Cases.

Circumstances alter law as well as cases. This is exemplified in the refusal of the courts to enforce against telegraph companies the strict rules applied to newspapers. The business of transmitting communication for hire from

one person to another by telegraph, whether by radio or by wire, is a public utility and operates under public obligations of a serious character. Its facilities are open to everyone who will pay the price. It may not refuse service nor decline to transmit any proper message. Yet it is under an obligation, which sometimes conflicts, not to allow its facilities to be used for injury. It is its duty to refuse to transmit matter obviously defamatory. In view of these conditions, the courts have modified the rule of absolute liability and substituted the standard of good faith and reasonable care. If the company acts in good faith and exercises reasonable care, it avoids responsibility even though it may transmit, and technically publish, a message libelous in fact. A Federal court, after referring to the statutes which compel service, has said:

While none of these statutes makes any exception as to the character of the messages which may be offered for transmission, and while it is certain that no telegraph company can assume to act as censor as to the language of messages, or the purpose they are intended to accomplish, yet, as a common carrier of persons, though bound to carry everyone who pays the fare, may exclude from his vehicle a person having a loathsome contagious disease, so, equally, it would be the right and duty of a telegraph company to refuse to transmit a message which upon its face is obscene, profane, or clearly libelous, and manifestly intended only for the purpose of defamation.

The receiving clerk scans a message rapidly to see that it is legible, and, from its direction and number of words, to determine the charge of sending. Having no duty of censorship, or right to catechise the sender, if he acts in good faith, and the language of the message is such that a person of ordinary intelligence, knowing nothing of the parties or circumstances, would not necessarily conclude that defamation was the object and purpose of the message, it would be his duty to send it, and for his performance of that duty the telegraph company would incur no responsibility.

Another case² announces the applicable rule as follows:

Where a proffered message is not manifestly a libel, or susceptible of a libelous meaning, on its face, and is forwarded in good faith by the

¹ Nye v. Western Union Telegraph Company, 104 Fed. 628, 630.

² Peterson v. Western Union Telegraph Company, 67 N. W. (Minn.) 646.

operator, the defendant cannot be held to have maliciously published a libel, although the message subsequently proves to be such in fact. In such a case the operator cannot wait to consult a lawyer, or forward the message to the principal office for instructions. He must decide promptly, and forward the message without delay if it is a proper one, and for any honest error of judgment in the premises the telegraph company cannot be held responsible.

The same rule of good faith is stated in a subsequent decision:

The company has no right to receive and transmit libelous messages. Its agents are limited in the same way. Like other common carriers, the telegraph company is bound to use care and diligence in carrying on its business, and to take reasonable care, at least, not to injure others. If a message offered for transmission is anonymous or is libelous on its face, it should not be received and transmitted. The company should so instruct its agents, and the agents should so act.

Liability of Radio Telegraph Company.

These decisions have direct application to point-to-point commercial service by radio, and the conclusion can probably be safely reached from the precedents that a radio company engaged in communication business as a common carrier is responsible only in damages for the transmission of messages libelous on their face or the libelous character of which would be discovered by the exercise or ordinary care and good faith. Whether such care has been exercised must, of course, be determined from the particular circumstances of each case. The application of the rule of reasonable care in the telegraph cases is an extraordinary exception to the standard of absolute liability enforced against others.

Application of Rules to Broadcasting.

In ordinary broadcasting, as distinguished from commercial point-to-point service, the situation is entirely different. The station is not usually a common carrier nor a public utility, nor under any obligation to transmit.

¹ Western Union Telegraph Company v. Cashman, 149 Fed. 367, 371.

² For full discussion of the liability of telegraph companies for libelous messages, see 20 Columbia Law Review 30, 369.

Unlike the telegraph company, it does exercise the power of censorship. Like the newspaper it may publish or not, at its will.¹ Precedent therefore calls for the imposition of a strict liability, and the general rule that the voluntary publisher assumes the risk may be applied. Yet the distinct variances in the situations, especially in the means of protection, may lead the courts to apply the more reasonable rule of due care. As has been said, it is not humanly possible for the station manager to prevent all calumny, for the defamatory statement may go out before he can realize its nature and cut off the transmission. The law should not require the impossible, and force of circumstances may often demand the adoption of the due care doctrine.

Broadcaster's Liability for Utterances of Self or Agents.

If the broadcaster himself utters the defamatory matter before the microphone, there is no problem. He is liable for the same reasons and to the same extent as any other defamer who chooses a different means of publicity. If he hires someone else to do so, his liability is the same, for the law imputes the words of the speaker to him and makes them his own. If the person speaking is his employee, liability would be governed by the usual rules of law under which a principal is responsible for wilful or malicious defamation by his agent or employee acting within the scope of his authority.2 The station owner may be innocent in fact. He may have no notice of the speaker's intent, and the utterance may be made before it is possible for him to break the connection from the microphone to the antenna. But under the general rules of principal and agent or master and servant, the possibility of preventing harm is of no importance. If the speaker is in law the agent or employee of the broadcaster, the latter is liable for his defamatory utterances, regardless of care or

¹ Even the provision of Section 18 of the Radio Act of 1927 does not impair its final liberty in this respect, for although it is required to permit its use to all qualified candidates for a given public office if it does so for any, it is still free to refuse all, so that the ultimate choice is its own.

NEWELL, on "Slander and Libel," 3d ed., p. 459.

lack of it, just as for his own utterances. Obviously, however, there will be very few instances in which either express or implied authority has been given an agent or employee to engage in slander.

Liability in Absence of Agency.

A common practice in broadcasting today is to invite talented persons to appear in the studio and speak or sing through the microphone. They are not paid nor do they pay the owner, each doing his part for reasons satisfactory to him and having no relation or obligation to the other. The speaker is not an employee and the true relationship of master and servant does not exist. Some supervision may be exercised by the broadcaster, who may censor the manuscript or score and fix and limit time. This control and direction is, however, more superficial than real, and the two parties, the speaker and the broadcaster, occupy the character of volunteers in a joint undertaking. If under these circumstances the speaker defames another, there would be no agency, and no preconceived design or conspiracy.

To impose a rule of absolute liability under such circumstances is somewhat shocking. It might make the station owner subject to the payment of damages for an injury which he could not prevent and which involves neither wrongdoing nor negligence on his part. It is an easy answer to say that he need not broadcast and if he does he must suffer all the consequences. But that is not the rule applied to the conduct of other business no more legitimate, in which under the law of tort liability depends upon fault. Justice seems to require the application of the due care doctrine, a declaration that if the broadcaster has exercised reasonable care under all the circumstances, has done everything possible to guard against the injury, the responsibility will not be cast upon him but will fall solely upon the speaker.

Whether or not due care has been exercised would necessarily be determined only by the facts and circumstances of each case. The character of the speaker, whether or not he was required to submit his prepared remarks in advance, the maintenance of a monitor instructed to cut the transmission of defamatory matter, the opportunity for prevention, and the grounds for anticipation or the lack of them are features which might reasonably be taken into consideration in determining whether proper care had been exercised in the particular case.

The decision which must be made by the courts when forced to the necessity of choosing between the two standards, one calling for reasonable care and the other imposing absolute liability, will depend upon whether they are controlled by past adjudications or abandon precedent and apply rules of reason to changing conditions. He would be a bold prophet who would now attempt to predict the outcome.

Another class of cases may arise. An independent party may rent or lease, for a long or short period, the entire facilities of the broadcasting station. He chooses and arranges his own program, though the broadcaster continues to operate the electrical devices. The talent appearing before the microphone is procured and paid for by the outsider. In the event of defamatory transmission under these circumstances, the latter is clearly liable, but is the broadcaster also responsible? This is the converse of the situation first illustrated. Here the third party is the principal and the broadcaster the agent. Without doubt the broadcaster is liable if he knowingly participates in the transmission of such matter. But if he has no reason to anticipate and cannot prevent the defamation, the general rule of absolute liability seems too harsh, and the doctrine of reasonable care again seems the fair one.

Public addresses and varied forms of entertainment are broadcast from places outside of the studio. The pick-up apparatus is set at the place where the matter originates,

and transmits it by wire to the studio. In such cases, the broadcaster has no opportunity to censor in advance, and he makes no pretense of doing so. The proceedings are wholly within the control and discretion of others. speech, it may or may not be in writing. The speaker alone determines what he will say. The spoken matter in all instances is beyond the control of the broadcaster. only case which has arisen in the United States is one of this character.1 A broadcasting station was sending out the Sunday morning service of an Oklahoma church. In the course of his sermon, the pastor of the church made statements which a local official considered false, defamatory, and injurious to his reputation. He thereupon sued the owner of the broadcasting station for damages. A demurrer to the complaint was filed by the broadcaster and was sustained, without written opinion. The case was finally withdrawn by the plaintiff. The situation in such a case is parallel to that where the broadcaster and the invited speaker jointly undertake to broadcast for mutual accommodation. The possibilities of legal decision in that situation have already been suggested.

Simultaneous Broadcasting.

So far we have considered only the original parties to the utterance, the speaker and the broadcaster who first afford it publication. Even their legal liabilities cannot be declared with certainty, and there is still another element which enters to add more doubt. The defamatory matter may be broadcast not only from the station of origin but from any number of others, with whom the first may or may not have a legal relationship. The practice of simultaneous broadcasting, effected through wire connection or by the radio wave itself, has already advanced from the experimental to the common. It has been suggested that the second station is legally in the position of repeating the transmission of the first and that the liability of the first

for the additional publicity given its matter by the second may be determined by the rules governing repetitions of libels or slanders.

Frequent instances have occurred where defamatory words have been republished or repeated by a third person, and the injured party has attempted to hold the original publisher or utterer liable for the repetition. The usual illustrations are the copying by one newspaper of a libel published in another or the oral repetition of defamatory conversations.

The liability of the original author for its repetition is not determined by the same standards in all the states, and the precedents in each state must therefore be considered.

The one who repeats an actionable slander or libel is always responsible to the injured party. In a number of states, the original author is not liable for an unauthorized and voluntary repetition. The author is held liable in some jurisdictions for the second publication, if the repetition is the natural and probable consequence of the original. Other states deny liability on the ground that one is never responsible for the independent illegal act of another. other cases the facts were such that the courts concluded that the repetition was the natural and probable consequence of the original publication and so held the original publisher or defamer liable, while under different facts the original publisher has been held not liable, the general rule, however, being recognized. In England, it has been held that the original publisher or utterer is liable if there was a moral duty to repeat, but no American case has taken that position.1

When used to describe the simultaneous broadcasting of programs by several stations, the term "rebroadcasting" is misleading. It implies a second publication of what has already been once transmitted. It has led to the thought

¹ The substance of the law stated in this paragraph will be found contained in a note to Maylog v. Cummings, 16 A. L. R. 726.

suggested above that broadcasting by a station other than that of origin is the same as repetition in slander and libel. But that is not true. Radio stations may be connected by wire, in the sense that one wire, or pair of wires, reaches each, but there is no relation between them. Each is an independent broadcaster, though all take identical matter from the same source. One may cease without affecting the others. It is as though an independent wire ran from the voice of the speaker to each station separately. It is not a case of repetition by any, but of original transmission by all. Their liability is therefore several, not joint, and no one is liable for defamation voluntarily spread by the other. Liability would be determined under the principles already discussed.

A like situation arises if matter is broadcast from one station, and without its knowledge or consent a second station takes the transmission and broadcasts it to its own Strictly speaking, this, of course, is not a case audience. of repetition because there is no second voicing. Both operations are instantaneous and proceeding at the same time. This practice is prohibited by the Radio Act of 1927,1 and the action of the second station is therefore unlawful. Itis difficult to see on what principle the first station could be held liable for the additional publicity given to the defamatory matter by the broadcasting of the second. Some cases have already been cited, holding that in the ordinary repetition of libel or slander, the original speaker is not liable for the second publicity since he is not responsible for the independent and illegal act of another. If there is a contractual or permissive relation between the two stations, liability would be determined under the ordinary rules of agency.

Venue of Action.

The gist of an action or prosecution for either libel or slander being the publication of the defamatory statements, a single radio broadcast may create liability in more than

¹ Section 28.

one jurisdiction. A statement broadcast in New York may reach listeners in Illinois and be libelous of a citizen of that state. It is easy to conceive possible instances of this sort. So far as civil liability is concerned, the necessity for personal service of process would in most cases preclude action elsewhere than in the state of residence of the libeller, and in the Federal courts venue is fixed in the district where the defendant resides, under the general provision governing actions dependent upon diversity of citizenship.

Liability to criminal prosecution in a state other than that in which the transmitting station is located presents a more difficult question, involving the possibility of prosecution by a state for acts committed beyond its borders, application of particular statutes, extradition, and removals. Analogy may be found in the cases determining the liability of the owner of a newspaper printed in one state and circulated in another. In a case involving newspaper publication in Indianapolis with the circulation of a few copies in the District of Columbia, the Federal Court held that there was only a single publication in Indianapolis, and in refusing to order the removal of the defendant to the District of Columbia to answer a charge of libel there, said:

When a newspaper owner or proprietor does what the evidence in this case shows these defendants did—composed, printed, and deposited in the mails for circulation these papers containing, for the purpose of this statement, libelous articles—either they are guilty here, and in every county and district and jurisdiction into which those papers go, or they are only guilty here. When these defendants put newspapers containing the alleged libelous articles into the post office here in Indianapolis, which went through the mails throughout the country, to various states, counties, and districts of the United States, either they committed a separate crime every time one of those papers went into another county, another state, or another district, or there was but one crime, and that crime was committed here.

A later case in Washington, distinguishing United States v. Smith, held that the proprietor of a paper published in California but circulated also in Washington was subject

¹ United States v. Smith, 173 Fed. 227, 231.

to prosecution in the latter state for any libelous matter so published. The court said:1

If a person residing without the state publishes a libel against a citizen of the state and circulates such libel within the state, he is as much subject to punishment within the state as any citizen of the state. The mere fact that he resides outside of the state and publishes the libel outside of the state is no excuse for a violation of the law of the state.

There can be no doubt of the power of the state to prosecute a non-resident of the state who commits a crime against the law of the state by shooting across the line, or by causing a nuisance in a stream running from one state into another which results in injury to this state. The publishing of a libel stands on exactly the same footing.

A text writer states the general rule as follows:2

A prosecution for libel, in the absence of statute, is sustainable in any county where a periodical containing it circulates or to which it is mailed for publication.

A transmission of a newspaper published in one state to one of the counties of another state for circulation renders the publisher liable to prosecution in such county.

Conclusion.

It is apparent that no dogmatic conclusion can be reached on any phase of this subject. The very bases of liability are in doubt. No one can say with certainty whether radio defamation in many instances will be classed as libel or as slander, nor safely predict whether absolute liability will be imposed or only reasonable care required. With these fundamental principles in doubt, the entire situation is permeated with uncertainty.

¹ State v. Piver, 132 Pac. (Wash.) 858. For case note see Ann. Cas. 1915A 697.

¹ NEWELL, on "Slander and Libel," 4th ed., p. 917.

CHAPTER XI

INTERNATIONAL LAW

International law has been defined to be a system of rules of reason, morality, and custom established among civilized nations as their public law and consists of rules of conduct which reason deduces as consonant with justice, from the nature of society existing among independent nations, with such definitions and modifications as may be established by general consent.¹ It is much more succinctly stated to be the principles and rules adopted by civilized states as binding upon them in their dealings with each other.²

Apart from a few special agreements, treaties, or conventions, there is no specific international law governing radio communication, except as its general principles may be applicable.

International Law in Time of War.

The status of radio stations and the rights and duties of persons operating them in time of war have not been fully defined, but a few articles of existing conventions to which the United States is a party³ deal directly or indirectly with the subject.

The Land War Neutrality Convention.4

Article 3 of this convention prohibits the erecting of radio stations by belligerents on neutral territory and also the use by belligerents of any radio station established on

- ¹ Heirn v. Bridault, 37 Miss. 209, 230; Wheat. Int. Law, 36.
- ¹ Charles Evans Hughes, before American Society of International Law, Nineteenth Annual Meeting.
- ¹ The Hague Conventions and Declarations of 1899 and 1907 (James B. Scott), pp. 139, 180, 217.
 - ⁴ Malloy, "Treaties, Conventions, etc.," vol. II, pp. 2297, 2298.

such territory before the war for purely military purposes and not previously opened for the service of public messages. Article 5 obliges the neutral power not to allow any such proceeding by a belligerent.

Under Article 8, a neutral power is not bound to forbid or restrict the employment on behalf of belligerents of radio stations belonging to it or to companies or private individuals.

Under Article 9, the neutral power must apply to the belligerents impartially the measures taken by it under Article 8 and must enforce them on private owners of radio stations.

Convention for the Adaptation to Naval War of the Principles of the Geneva Convention.

By Article 8 of this convention, it is provided that the presence of a radio installation on board a hospital ship does not of itself justify the withdrawal of the protection to which a hospital ship is entitled so long as she does not commit acts harmful to the enemy.

Convention Concerning Neutral Rights and Duties in Maritime Warfare.²

Under this convention, belligerents are forbidden, as part of the general prohibition of the use of neutral ports and waters as a base of naval operations, to erect radio stations therein, and, under Article 25, a neutral power is bound to exercise such supervision as the means at its disposal permit to prevent any violation of this provision.

The Unratified Declaration of London of 1909.

This declaration was signed by the powers represented in the Naval Conference. It embodied rules which corresponded in substance with the generally recognized principles of international law, and specified in Articles 45 and 46 certain acts in which the use of radio telegraphy

¹ Malloy, "Treaties, Conventions, etc.," vol. II, p. 2334.

² Malloy, "Treaties, Conventions, etc.," vol. II, pp. 2359, 2362.

might play an important part as acts of unneutral service. Under Article 45, a neutral vessel was to be liable to condemnation if she was on a voyage specially undertaken with a view to the transmission of intelligence in the interest of the enemy. Under Article 46, a neutral vessel was to be condemned and receive the same treatment as would be applicable to an enemy merchant vessel if she took a direct part in hostilities or was at the time exclusively devoted to the transmission of intelligence in the interest of the enemy. It should be borne in mind that by Article 16 of the Rules for Aerial Warfare, an aircraft is deemed to be engaged in hostilities if in the interests of the enemy she transmits intelligence in the course of the flight.

Efforts to Arrive at Agreement Concerning Radio Stations in War Times.

During the Conference on the Limitation of Armaments, on February 4, 1922, a resolution was adopted by the United States, the British Empire, France, Italy, and Japan, which provided for a commission to study the status of radio stations in time of war and the Commission of Justice appointed under this resolution was authorized to consider the following questions:

- 1. Do existing rules of international law adequately cover new methods of attack or defense resulting from the introduction or development, since The Hague Conference of 1907, of new agencies of warfare?
- 2. If not so, what changes in the existing rules ought to be adopted in consequence thereof as a part of the laws of nations?

The Dutch government was invited to be represented on the commission, the meetings being held at The Hague, and it was agreed that the work of the commission should be substantially confined to the two subjects of aircraft and radio. Thirty plenary sessions were held, beginning December 11, 1922, and ending February 19, 1923, and rules for the control of radio in time of war were recommended. The United States advised the other powers that it was prepared to enter into a treaty making these rules

obligatory. No general acceptance of this proposal has as yet been obtained.

The Berlin Convention.

A conference of representatives of various governments, including the United States, was held in Berlin in 1903, but aside from discussing drafts of conventions, did not accomplish any definite result. A further conference was held in 1906 and resulted in the signature, at Berlin, on November 3, 1906, of the first international wireless telegraph convention.1 Action by the Senate on the convention was delayed and it was not until April 3, 1912, when arrangements were being made for holding a further conference at London, that the Senate advised and consented to ratification. As a result the United States was represented by delegates at the London Conference, which drew up a new convention and regulations, which was signed by the representatives of this government on July 5, 1912, and ratified by the Senate on January 22, 1913.2 The Berlin Convention of 1906 remains in force only with respect to questions arising between the United States and countries which ratify or adhere to it but have not ratified or adhered to the London Convention of 1912.

Scope of London Convention.

The first practical use of radio was for communications across water. This was natural. The land already had its communication system. But on the water, communication reached only as far as the eye could see or the ear hear. A shout through a megaphone or the wave of a flag were the only known methods, and the marine interests gladly welcomed a system which kept them in touch with one another and the land. Responses to the wireless call for aid in great marine disasters stimulated imagination and taught the world what such communication meant in terms of human lives. The nations began to require radio apparatus as a

MALLOY, "Treaties, Conventions, etc.," vol. III, p. 2889.

² Malloy, "Treatics, Conventions, etc.," vol. III, p. 3048.

part of ship equipment. The Postmaster General of England, officially greeting the delegates to the London Conference of 1912, welcomed "the representatives of all the countries interested in radio communication by wireless telegraphy between vessels and the shore and between vessels on the high seas." Article I of the convention as adopted recites that the provisions are applicable to "all radio stations, both coastal and on shipboard which are . . . open to public service between the coast and vessels at sea," and by Article II coastal stations are defined as those used for the exchange of correspondence with ships at sea. Other forms of radio communication were then of minor importance. Stations conducting them were by Article XXI relieved from the convention obligations, except as to the duty to intercommunicate, to minimize interference, to respond to distress calls, and to give them priority. These services, including the great systems of point-to-point radio telegraph and broadcasting, remain today practically free from any international agreement.

Principal Features of London Convention.

The principal feature of the convention proper was the requirement of Article III that stations must receive communication from one another although operating with different equipment. The British Marconi Company then owned or controlled most of the shore stations of the world, and refused to handle messages from ships and other stations equipped with other than the Marconi apparatus. Its competitors were thereby greatly handicapped, for in many instances they were in the position of having a communication line with only one end. The 1912 convention terminated this condition and brought about intercommunication irrespective of system.

Other clauses of the convention provide for priority for calls of distress (Article IX), for the division of rates between coastal and ship stations (Article X), and for the

Already in force in the United States as to ships, Act of June 24, 1910.

² See JOME, "Economics of the Radio Industry," p. 22.

continuation of the Berne Bureau as a central agency for information (Article XIII).

Reservations.

The American delegates made a reservation as to the rate features of the convention as follows:

The delegation of the United States declares that its government is under the necessity of abstaining from all action with regard to rates, because the transmission of radiograms as well as of ordinary telegrams in the United States is carried on, wholly or in part, by commercial or private companies.

The Senate in consenting to ratification expressed the following understanding:

That nothing in the ninth article of the regulations affixed to the convention shall be deemed to exclude the United States from the execution of her inspection laws upon vessels entering in or clearing from her ports.

Regulations.

Attached to the convention are fifty scparate regulations having to do with station operation. They present no important legal questions and are obsolete in many respects. Detailed discussion of them is not deemed necessary. Perhaps their most effective features are the requiring of licenses for ship stations and operators; the setting aside of the wavelengths of 300 and 600 meters for marine use, although the use of 300 meters by such American stations has been discontinued; the prohibition of coastal stations from using wavelengths between 600 and 1,600 meters; the adoption of the continental code; the agreement on abbreviations for distress and other signals and arrangements for accounting.

Convention on Safety of Life at Sea.

The International Convention on Safety of Life at Sea, signed at London in 1914, contains provisions relative to radio equipment on vessels, but, although the United States

signed the convention, complete ratification has not been effected, and it is not binding upon this government. The convention was submitted to the Senate, which gave its advice and consent to its ratification, with a reservation which the Executive considered objectionable.

Radio Stations in China.

The regulation of radio between China and the rest of the world is subject to a special agreement, drawn up at the Limitation of Armament Conference at Washington in 1922. The resolution on the subject was unanimously approved at the thirteenth meeting of the Committee on Pacific and Far Eastern questions. It provides that all radio stations in China, whether maintained under the provisions of the International Protocol of September 7, 1901, or in fact in the grounds of any of the foreign legations in China, shall be limited in their use to sending and receiving government messages, and shall not receive or send commercial or personal or unofficial messages, including press matter, except when all other telegraphic communication is interrupted, and then only by complying with certain formalities. vision was further made that all radio stations should be operated strictly in accordance with the terms of the treaties or concessions under which they were maintained, and that if any radio station was maintained in China by a foreign government or citizen thereof without the authority of the Chinese Government, such station and all the plant or apparatus should be transferred and taken over by the Chinese Government upon the payment of fair compensation therefor.1 The resolution was adopted at the Fifth Plenary Session of the Conference, February 1, 1922.2

Radio Stations in Canal Zone and Vicinity.

Under arrangements made with Panama, the United States has established several important radio stations in the Canal Zone and controls radio stations in Panama. Provi-

¹ See Proceedings of Conference on Limitation of Armament, p. 1078, 1082.

² See Proceedings of Conference on Limitation of Armament, p. 196.

sions respecting them are contained in the treaty concerning "Rights in the Canal Zone," which was signed on December 9, 1926, and is now pending before the United States Senate.

Service with Italy.

A protocol relative to the establishment of radio service with Italy was signed at Washington, March 27, 1918.1

Transmission over Foreign Territory.

The right of a state to forbid the passage over its territory of waves emanating from a foreign radio station has been asserted.²

The right is of questionable value, there being no known method by which the complaining state can prevent signals entering and crossing it, although it might destroy their communication value,³ and it being equally beyond the power of the transmitting station to restrain them from traveling beyond national boundaries and in all directions, though the development of beam or directional transmission may change the situation in the latter respect. Certainly, however, the sending from one country of impulses or communications harmful to another would be an invasion of the sovereignty of the latter of which it might justly complain, as in the case of other international injuries.

Call Letters.

Since the 1912 convention, call letters for use in the various countries adhering to it have been assigned by the Berne Bureau, the United States receiving all combinations

- ¹ Malloy, "Treaties, Conventions, etc.," vol. III, p. 2707.
- ² ОРРЕННЕІМ, "International Law," р. 313. See Пурв, "International Law," р. 192.
- ² An interesting incident of this character is mentioned in a news item as follows: "News came from Bucharest last week that the Soviet Russian radio stations at Moscow and Odessa are now broadcasting nightly criticisms of the Rumanian government in Rumania and appealing to Rumanian listeners-in to foment a revolt. Vexed, War Minister Mircescu has countered by ordering the Rumanian military radio station to send out 'a terrific buzzing' whenever the Soviet Russian stations begin to broadcast."—*Time*, October, 1926.

beginning with N and W, and those with K from KDA to KZZ

Allocation of Wavelengths.

So far as concerns the efficiency of station operation of the non-marine services, the only problem which may merit international attention is that of interference resulting from the fact that the number of available channels is limited. In the past, this has caused little difficulty. There have been wavelengths sufficient to meet all demands. Each station operating point-to-point international service has been able to find unused wavelengths and has proceeded to preempt them. Newcomers have respected the possession of their predecessors. Whether this peaceful condition will continue or whether there will be ultimate conflict and confusion depends upon many factors still unknown, including the growth in the number of such stations, the rendering useful of the high frequencies and the development of beam or directional transmission.

In a draft for an international convention made in 1920 at what is known as the Washington Conference on Electrical Communications an attempt was made at a general allocation dividing wavelengths among the countries of the world. It has never become effective. The consensus of present informed sentiment seems to be that the time has not yet come when such a division is required.

Broadcasting has developed in this country without international complications of consequence. European stations do not reach us, nor do ours disturb the reception of those across the ocean. Difference in time is an important factor.

Relations with Canada.

Until very recently, so long indeed as the use of wavelengths was governmentally controlled in the United States, there was no interference between American and Canadian transmission. Since the cessation of that

control, several American stations have seized upon channels in use in Canada, thus causing interference in that country. If Canada should retaliate by adopting the same course toward American wavelengths, an aerial radio war might result whose only solution would be either the final survival of the strongest or the adoption of an equitable agreement. The latter course is strongly indicated and quite probable in the near future.

Mexico and Cuba sent representatives to the Fourth Radio Conference at Washington at which the allocation of wavelengths was discussed.

European Agreement.

A similar situation in Europe has resulted in a working understanding among the administrations of the various nations for an allocation of broadcasting wavelengths among them. Since the range of most European stations is much greater than the area of the country in which they are located, such an agreement was essential if simultaneous broadcasting was to continue. It is understood that Russia alone has refused to enter the arrangement, asserting its intention to exercise its absolute right to transmit on whatever frequency it pleases, irrespective of the effect upon its neighbors.

International Rights in Wavelengths.

There has been little discussion and no determination of the rights to the use of radio waves as between stations in different countries. There is neither precedent nor analogy by which to decide. The appropriation of a physical thing is not involved. Certainly each sovereignty is free to allow its nationals to operate radio apparatus at such frequencies as may be most expedient. The fact that a station in some other country may already be doing the same thing does not militate against the right. Yet, on the other hand, every nation may well resent, as an invasion of its sovereignty, the sending within its terri-

tories of harmful electrical impulses, on the same principle, though of course not in the same degree, that it would protest the shooting of projectiles across its borders. There would seem to be equal sovereign rights on each side, which can be accommodated and reconciled only by agreement. If and when the time comes that conditions make such an agreement necessary, which so far as the United States is concerned is not yet, excepting probably with Canada, full consideration will doubtless be given to established circuits and services and to the equities arising from priority of appropriation and use.

Washington Conference, 1927.

The government of the United States has invited the nations of the world to a radio conference at Washington which will presumably be held during October, 1927. Its scope will include not only the revision of the 1912 London Conventions and its regulations, but also the consideration of the extension of international regulation to services other than marine.

APPENDIX

[Public-No. 632-69TH CONGRESS]

[H. R. 9971]

An Act For the regulation of radio communications, and for other purposes. Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act is intended to regulate all forms of interstate and foreign radio transmissions and communications within the United States, its Territories and possessions; to maintain the control of the United States over all the channels of interstate and foreign radio transmission; and to provide for the use of such channels, but not the ownership thereof, by individuals, firms, or corporations, for limited periods of time, under licenses granted by Federal authority, and no such license shall be construed to create any right, beyond the terms, conditions, and periods of the license. That no person, firm, company, or corporation shall use or operate any apparatus for the transmission of energy or communications or signals by radio (a) from one place in any Territory or possession of the United States or in the District of Columbia to another place in the same Territory, possession, or District; or (b) from any State, Territory, or possession of the United States, or from the District of Columbia to any other State, Territory, or possession of the United States; or (c) from any place in any State, Territory, or possession of the United States, or in the District of Columbia, to any place in any foreign country or to any vessel; or (d) within any State when the effects of such use extend beyond the borders of said State, or when interference is caused by such use or operation with the transmission of such energy, communications, or signals from within said State to any place beyond its borders, or from any place beyond its borders to any place within said State, or with the transmission or reception of such energy, communications, or signals from and/or to places beyond the borders of said State; or (e) upon any vessel of the United States: or (f) upon any aircraft or other mobile stations within the United States, except under and in accordance with this Act and with a license in that behalf granted under the provisions of this Act.

SEC. 2. For the purposes of this Act, the United States is divided into five zones, as follows: The first zone shall embrace the States of Maine. New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Delaware, Maryland, the District of Columbia, Porto Rico, and the Virgin Islands; the second zone shall embrace the States of Pennsylvania, Virginia, West Virginia, Ohio, Michigan, and Kentucky; the third zone shall embrace the States of North Carolina, South Carolina, Georgia, Florida, Alabama, Tennessee, Mississippi, Arkansas,

Louisiana, Texas, and Oklahoma; the fourth zone shall embrace the States of Indiana, Illinois, Wisconsin, Minnesota, North Dakota, South Dakota, Iowa, Nebraska, Kansas, and Missouri; and the fifth zone shall embrace the States of Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, the Territory of Hawaii, and Alaska.

SEC. 3. That a commission is hereby created and established to be known as the Federal Radio Commission, hereinafter referred to as the commission, which shall be composed of five commissioners appointed by the President, by and with the advice and consent of the Senate, and one of whom the President shall designate as chairman: Provided, That chairmen thereafter elected shall be chosen by the commission itself.

Each member of the commission shall be a citizen of the United States and an actual resident citizen of a State within the zone from which appointed at the time of said appointment. Not more than one commissioner shall be appointed from any zone. No member of the commission shall be financially interested in the manufacture or sale of radio apparatus or in the transmission or operation of radiotelegraphy, radiotelephony, or radio broadcasting. Not more than three commissioners shall be members of the same political party.

The first commissioners shall be appointed for the terms of two, three, four, five, and six years, respectively, from the date of the taking effect of this Act, the term of each to be designated by the President, but their successors shall be appointed for terms of six years, except that any person chosen to fill a vacancy shall be appointed only for the unexpired term of the commissioner whom he shall succeed.

The first meeting of the commission shall be held in the city of Washington at such time and place as the chairman of the commission may fix. The commission shall convene thereafter at such times and places as a majority of the commission may determine, or upon call of the chairman thereof.

The commission may appoint a secretary, and such clerks, special counsel, experts, examiners, and other employees as it may from time to time find necessary for the proper performance of its duties and as from time to time may be appropriated for by Congress.

The commission shall have an official seal and shall annually make a full report of its operations to the Congress.

The members of the commission shall receive a compensation of \$10,000 for the first year of their service, said year to date from the first meeting of said commission, and thereafter a compensation of \$30 per day for each day's attendance upon sessions of the commission or while engaged upon work of the commission and while traveling to and from such sessions, and also their necessary traveling expenses.

- SEC. 4. Except as otherwise provided in this Act, the commission, from time to time, as public convenience, interest, or necessity requires, shall—
 - (a) Classify radio stations:

¹ The first meeting was held in Washington, D. C., March 15, 1927.

- (b) Prescribe the nature of the service to be rendered by each class of licensed stations and each station within any class;
- (c) Assign bands of frequencies or wave lengths to the various classes of stations, and assign frequencies or wave lengths for each individual station and determine the power which each station shall use and the time during which it may operate;
 - (d) Determine the location of classes of stations or individual stations;
- (e) Regulate the kind of apparatus to be used with respect to its external effects and the purity and sharpness of the emissions from each station and from the apparatus therein;
- (f) Make such regulations not inconsistent with law as it may deem necessary to prevent interference between stations and to carry out the provisions of this Act: Provided, however, That changes in the wave lengths, authorized power, in the character of emitted signals, or in the times of operation of any station, shall not be made without the consent of the station licensee unless, in the judgment of the commission, such changes will promote public convenience or interest or will serve public necessity or the provisions of this Act will be more fully complied with:
- (g) Have authority to establish areas or zones to be served by any station:
- (h) Have authority to make special regulations applicable to radio stations engaged in chain broadcasting;
- (i) Have authority to make general rules and regulations requiring stations to keep such records of programs, transmissions of energy, communications, or signals as it may deem desirable:
- (j) Have authority to exclude from the requirements of any regulations in whole or in part any radio station upon railroad rolling stock, or to modify such regulations in its discretion;
- (k) Have authority to hold hearings, summon witnesses, administer oaths, compel the production of books, documents, and papers and to make such investigations as may be necessary in the performance of its duties. The commission may make such expenditures (including expenditures for rent and personal services at the seat of government and elsewhere, for law books, periodicals, and books of reference, and for printing and binding) as may be necessary for the execution of the functions vested in the commission and, as from time to time may be appropriated for by Congress. All expenditures of the commission shall be allowed and paid upon the presentation of itemized vouchers therefor approved by the chairman.
- Sec. 5. From and after one year after the first meeting of the commission created by this Act, all the powers and authority vested in the commission under the terms of this Act, except as to the revocation of licenses, shall be vested in and exercised by the Secretary of Commerce; except that thereafter the commission shall have power and jurisdiction to act upon and determine any and all matters brought before it under the terms of this section.
 - It shall also be the duty of the Secretary of Commerce-
- (A) For and during a period of one year from the first meeting of the commission created by this Act, to immediately refer to the commission all

applications for station licenses or for the renewal or modification of existing station licenses.

- (B) From and after one year from the first meeting of the commission created by this Act, to refer to the commission for its action any application for a station license or for the renewal or modification of any existing station license as to the granting of which dispute, controversy, or conflict arises or against the granting of which protest is filed within ten days after the date of filing said application by any party in interest and any application as to which such reference is requested by the applicant at the time of filing said application.
- (C) To prescribe the qualifications of station operators, to classify them according to the duties to be performed, to fix the forms of such licenses, and to issue them to such persons as he finds qualified.
- (D) To suspend the license of any operator for a period not exceeding two years upon proof sufficient to satisfy him that the licensee (a) has violated any provision of any Act or treaty binding on the United States which the Secretary of Commerce or the commission is authorized by this Act to administer or by any regulation made by the commission or the Secretary of Commerce under any such Act or treaty; or (b) has failed to carry out the lawful orders of the master of the vessel on which he is employed; or (c) has willfully damaged or permitted radio apparatus to be damaged; or (d) has transmitted superfluous radio communications or signals or radio communications containing profane or obscene words or language; or (e) has willfully or maliciously interfered with any other radio communications or signals.
- (E) To inspect all transmitting apparatus to ascertain whether in construction and operation it conforms to the requirements of this Act, the rules and regulations of the licensing authority, and the license under which it is constructed or operated.
- (F) To report to the commission from time to time any violations of this Act, the rules, regulations, or orders of the commission, or of the terms or conditions of any license.
 - (G) To designate call letters of all stations.
- (H) To cause to be published such call letters and such other announcements and data as in his judgment may be required for the efficient operation of radio stations subject to the jurisdiction of the United States and for the proper enforcement of this Act.

The Secretary may refer to the commission at any time any matter the determination of which is vested in him by the terms of this Act.

Any person, firm, company, or corporation, any State or political division thereof aggrieved or whose interests are adversely affected by any decision, determination, or regulation of the Secretary of Commerce may appeal therefrom to the commission by filing with the Secretary of Commerce notice of such appeal within thirty days after such decision or determination or promulgation of such regulation. All papers, documents, and other records pertaining to such application on file with the Secretary shall thereupon be transferred by him to the commission. The commission shall hear such appeal de novo under such rules and regulations as it may determine.

Decisions by the commission as to matters so appealed and as to all other matters over which it has jurisdiction shall be final, subject to the right of appeal herein given.

No station license shall be granted by the commission or the Secretary of Commerce until the applicant therefor shall have signed a waiver of any claim to the use of any particular frequency or wave length or of the ether as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise.

SEC. 6. Radio stations belonging to and operated by the United States shall not be subject to the provisions of sections 1, 4, and 5 of this Act. All such Government stations shall use such frequencies or wave lengths as shall be assigned to each or to each class by the President. All such stations, except stations on board naval and other Government vessels while at sea or beyond the limits of the continental United States, when transmitting any radio communication or signal other than a communication or signal relating to Government business shall conform to such rules and regulations designed to prevent interference with other radio stations and the rights of others as the licensing authority may prescribe. Upon proclamation by the President that there exists war or a threat of war or a state of public peril or disaster or other national emergency, or in order to preserve the neutrality of the United States, the President may suspend or amend, for such time as he may see fit, the rules and regulations applicable to any or all stations within the jurisdiction of the United States as prescribed by the licensing authority. and may cause the closing of any station for radio communication and the removal thereform of its apparatus and equipment, or he may authorize the use or control of any such station and/or its apparatus and equipment by any department of the Government under such regulations as he may prescribe, upon just compensation to the owners. Radio stations on board vessels of the United States Shipping Board or the United States Shipping Board Emergency Fleet Corporation or the Inland and Coastwise Waterways Service shall be subject to the provisions of this Act.

SEC. 7. The President shall ascertain the just compensation for such use or control and certify the amount ascertained to Congress for appropriation and payment to the person entitled thereto. If the amount so certified is unsatisfactory to the person entitled thereto, such person shall be paid only 75 per centum of the amount and shall be entitled to sue the United States to recover such further sum as added to such payment of 75 per centum which will make such amount as will be just compensation for the use and control. Such suit shall be brought in the manner provided by paragraph 20 of section 24, or by section 145 of the Judicial Code, as amended.

SEC. 8. All stations owned and operated by the United States, except mobile stations of the Army of the United States, and all other stations on land and sea, shall have special call letters designated by the Secretary of Commerce.

Section 1 of this Act shall not apply to any person, firm, company, or corporation sending radio communications or signals on a foreign ship while the same is within the jurisdiction of the United States, but such communications or signals shall be transmitted only in accordance with such regu-

lations designed to prevent interference as may be promulgated under the authority of this Act.

Sec. 9. The licensing authority, if public convenience, interest, or necessity will be served thereby, subject to the limitations of this Act, shall grant to any applicant therefor a station license provided for by this Act.

In considering applications for licenses and renewals of licenses, when and in so far as there is a demand for the same, the licensing authority shall make such a distribution of licenses, bands of frequency of wave lengths, periods of time for operation, and of power among the different States and communities as to give fair, efficient, and equitable radio service to each of the same.

No license granted for the operation of a broadcasting station shall be for a longer term than three years and no license so granted for any other class of station shall be for a longer term than five years, and any license granted may be revoked as hereinafter provided. Upon the expiration of any license, upon application therefor, a renewal of such license may be granted from time to time for a term of not to exceed three years in the case of broadcasting licenses and not to exceed five years in the case of other licenses.

No renewal of an existing station license shall be granted more than thirty days prior to the expiration of the original license.

Sec. 10. The licensing authority may grant station licenses only upon written application therefor addressed to it. All applications shall be filed with the Secretary of Commerce. All such applications shall set forth such facts as the licensing authority by regulation may prescribe as to the citizenship, character, and financial, technical, and other qualifications of the applicant to operate the station; the ownership and location of the proposed station and of the stations, if any, with which it is proposed to communicate; the frequencies or wave lengths and the power desired to be used; the hours of the day or other periods of time during which it is proposed to operate the station; the purposes for which the station is to be used; and such other information as it may require. The licensing authority at any time after the filing of such original application and during the term of any such license may require from an applicant or licensee further written statements of fact to enable it to determine whether such original application should be granted or denied or such license revoked. Such application and/ or such statement of fact shall be signed by the applicant and/or licensee under oath or affirmation.

The licensing authority in granting any license for a station intended or used for commercial communication between the United States or any Territory or possession, continental or insular, subject to the jurisdiction of the United States, and any foreign country, may impose any terms, conditions, or restrictions authorized to be imposed with respect to submarine-cable licenses by section 2 of an Act entitled "An Act relating to the landing and the operation of submarine cables in the United States," approved May 24, 1921.

SEC. 11. If upon examination of any application for a station license or for the renewal or modification of a station license the licensing authority shall determine that public interest, convenience, or necessity would be

served by the granting thereof, it shall authorize the issuance, renewal, or modification thereof in accordance with said finding. In the event the licensing authority upon examination of any such application does not reach such decision with respect thereto, it shall notify the applicant thereof, shall fix and give notice of a time and place for hearing thereon, and shall afford such applicant an opportunity to be heard under such rules and regulations as it may prescribe.

Such station licenses as the licensing authority may grant shall be in such general form as it may prescribe, but each license shall contain, in addition to other provisions, a statement of the following conditions to which such license shall be subject:

- (A) The station license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies or wave length designated in the license beyond the term thereof nor in any other manner than authorized therein.
- (B) Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of this Act.
- (C) Every license issued under this Act shall be subject in terms to the right of use or control conferred by section 6 hereof.
- In cases of emergency arising during the period of one year from and after the first meeting of the commission created hereby, or on applications filed during said time for temporary changes in terms of licenses when the commission is not in session and prompt action is deemed necessary, the Secretary of Commerce shall have authority to exercise the powers and duties of the commission, except as to revocation of licenses, but all such exercise of powers shall be promptly reported to the members of the commission, and any action by the Secretary authorized under this paragraph shall continue in force and have effect only until such time as the commission shall act thereon.
- Sec. 12. The station license required hereby shall not be granted to, or after the granting thereof such license shall not be transferred in any manner, either voluntarily or involuntarily, to (a) any alien or the representative of any alien; (b) to any foreign government, or the representative thereof; (c) to any company, corporation, or association organized under the laws of any foreign government; (d) to any company, corporation, or association of which any officer or director is an alien, or of which more than one-fifth of the capital stock may be voted by aliens or their representatives or by a foreign government or representative thereof, or by any company, corporation, or association organized under the laws of a foreign country.

The station license required hereby, the frequencies or wave length or lengths authorized to be used by the licensee, and the rights therein granted shall not be transferred, assigned, or in any manner, either voluntarily or involuntarily, disposed of to any person, firm, company, or corporation without the consent in writing of the licensing authority.

Sec. 13. The licensing authority is hereby directed to refuse a station license and/or the permit hereinafter required for the construction of a station to any person, firm, company, or corporation, or any subsidiary thereof, which has been finally adjudged guilty by a Federal court of unlaw-

fully monopolizing or attempting unlawfully to monopolize, after this Act takes effect, radio communication, directly or indirectly, through the control of the manufacture or sale of radio apparatus, through exclusive traffic arrangements, or by any other means or to have been using unfair methods of competition. The granting of a license shall not estop the United States or any person aggrieved from proceeding against such person, firm, company, or corporation for violating the law against unfair methods of competition or for a violation of the law against unlawful restraints and monopolies and/or combinations, contracts, or agreements in restraint of trade, or from instituting proceedings for the dissolution of such firm, company, or corporation.

SEC. 14. Any station license shall be revocable by the commission for false statements either in the application or in the statement of fact which may be required by section 10 hereof, or because of conditions revealed by such statements of fact as may be required from time to time which would warrant the licensing authority in refusing to grant a license on an original application, or for failure to operate substantially as set forth in the license, for violation of or failure to observe any of the restrictions and conditions of this Act, or of any regulation of the licensing authority authorized by this Act or by a treaty ratified by the United States, or whenever the Interstate Commerce Commission, or any other Federal body in the exercise of authority conferred upon it by law, shall find and shall certify to the commission that any licensee bound so to do, has failed to provide reasonable facilities for the transmission of radio communications, or that any licensee has made any unjust and unreasonable charge, or has been guilty of any discrimination, either as to charge or as to service or has made or prescribed any unjust and unreasonable classification, regulation, or practice with respect to the transmission of radio communications or service: Provided. That no such order of revocation shall take effect until thirty days' notice in writing thereof, stating the cause for the proposed revocation, has been given to the parties known by the commission to be interested in such license. person in interest aggrieved by said order may make written application to the commission at any time within said thirty days for a hearing upon such order, and upon the filing of such written application said order of revocation shall stand suspended until the conclusion of the hearing herein directed. Notice in writing of said hearing shall be given by the commission to all the parties known to it to be interested in such license twenty days prior to the time of said hearing. Said hearing shall be conducted under such rules and in such manner as the commission may prescribe. Upon the conclusion hereof the commission may affirm, modify, or revoke said orders of revocation.

SEC. 15. All laws of the United States relating to unlawful restraints and monopolies and to combinations, contracts, or agreements in restraint of trade are hereby declared to be applicable to the manufacture and sale of and to trade in radio apparatus and devices entering into or affecting interstate or foreign commerce and to interstate or foreign radio communications. Whenever in any suit, action, or proceeding, civil or criminal, brought under the provisions of any of said laws or in any proceedings brought to enforce

or to review findings and orders of the Federal Trade Commission or other governmental agency in respect of any matters as to which said commission or other governmental agency is by law authorized to act, any licensee shall be found guilty of the violation of the provisions of such laws or any of them, the court, in addition to the penalties imposed by said laws, may adjudge, order, and/or decree that the license of such licensee shall, as of the date the decree or judgment becomes finally effective or as of such other date as the decree shall fix, be revoked and that all rights under such license shall thereupon cease: Provided, however, That such licensee shall have the same right of appeal or review as is provided by law in respect of other decrees and judgments of said court.

SEC. 16. Any applicant for a construction permit, for a station license, or for the renewal or modification of an existing station license whose application is refused by the licensing authority shall have the right to appeal from said decision to the Court of Appeals of the District of Columbia; and any licensee whose license is revoked by the commission shall have the right to appeal from such decision of revocation to said Court of Appeals of the District of Columbia or to the district court of the United States in which the apparatus licensed is operated, by filing with said court, within twenty days after the decision complained of is effective, notice in writing of said appeal and of the reasons therefor.

The licensing authority from whose decision an appeal is taken shall be notified of said appeal by service upon it, prior to the filing thereof, of a certified copy of said appeal and of the reasons therefor. Within twenty days after the filing of said appeal the licensing authority shall file with the court the originals or certified copies of all papers and evidence presented to it upon the original application for a permit or license or in the hearing upon said order of revocation, and also a like copy of its decision thereon and a full statement in writing of the facts and the grounds for its decision as found and given by it. Within twenty days after the filing of said statement by the licensing authority either party may give notice to the court of his desire to adduce additional evidence. Said notice shall be in the form of a verified petition stating the nature and character of said additional evidence, and the court may thereupon order such evidence to be taken in such manner and upon such terms and conditions as it may deem proper.

At the earliest convenient time the court shall hear, review, and determine the appeal upon said record and evidence, and may alter or revise the decision appealed from and enter such judgment as to it may seem just. The revision by the court shall be confined to the points set forth in the reasons of appeal.

SEC. 17. After the passage of this Act no person, firm, company, or corporation now or hereafter directly or indirectly through any subsidiary, associated, or affiliated person, firm, company, corporation, or agent, or otherwise, in the business of transmitting and/or receiving for hire energy, communications, or signals by radio in accordance with the terms of the license issued under this Act, shall by purchase, lease, construction, or otherwise, directly or indirectly, acquire, own, control, or operate any cable or wire telegraph or telephone line or system between any place in any

State, Territory or possession of the United States or in the District of Columbia, and any place in any foreign country, or shall acquire, own, or control any part of the stock or other capital share of any interest in the physical property and/or other assets of any such cable, wire, telegraph, or telephone line or system, if in either case the purpose is and/or the effect thereof may be to substantially lessen competition or to restrain commerce between any place in any State, Territory, or possession of the United States or in the District of Columbia and any place in any foreign country, or unlawfully to create monopoly in any line of commerce; nor shall any person. firm, company, or corporation now or hereafter engaged directly or indirectly through any subsidiary, associated, or affiliated person, company, corporation, or agent, or otherwise, in the business of transmitting and/or receiving for hire messages by any cable, wire, telegraph, or telephone line or system (a) between any place in any State, Territory, or possession of the United States or in the District of Columbia, and any place in any other State, Territory, or possession of the United States; or (b) between any place in any State, Territory, or possession of the United States, or the District of Columbia, and any place in any foreign country, by purchase, lease, construction, or otherwise, directly or indirectly acquire, own, control, or operate any station or the apparatus therein, or any system for transmitting any/or receiving radio communications or signals between any place in any State, Territory, or possession of the United States or in the District of Columbia, and any place in any foreign country, or shall acquire, own, or control any part of the stock or other capital share or any interest in the physical property and/or other assets of any such radio station, apparatus, or system, if in either case the purpose is and/or the effect thereof may be to substantially lessen competition or to restrain commerce between any place in any State. Territory, or possession of the United States or in the District of Columbia, and any place in any foreign country, or unlawfully to create monopoly in any line of commerce.

Sec. 18. If any licensee shall permit any person who is a legally qualified candidate for any public office to use a broadcasting station, he shall afford equal opportunities to all other such candidates for that office in the use of such broadcasting station, and the licensing authority shall make rules and regulations to carry this provision into effect: *Provided*, That such licensee shall have no power of censorship over the material broadcast under the provisions of this paragraph. No obligation is hereby imposed upon any licensee to allow the use of its station by any such candidate.

SEC. 19. All matter broadcast by any radio station for which service, money, or any other valuable consideration is directly or indirectly paid, or promised to or charged or accepted by, the station so broadcasting, from any person, firm, company, or corporation, shall, at the time the same is so broadcast, be announced as paid for or furnished, as the case may be, by such person, firm, company, or corporation.

SEC. 20. The actual operation of all transmitting apparatus in any radio station for which a station license is required by this Act shall be carried on only by a person holding an operator's license issued hereunder. No person shall operate any such apparatus in such station except under and

in accordance with an operator's license issued to him by the Secretary of Commerce.

SEC. 21. No license shall be issued under the authority of this Act for the operation of any station the construction of which is begun or is continued after this Act takes effect, unless a permit for its construction has been granted by the licensing authority upon written application therefor. The licensing authority may grant such permit if public convenience, interest, or necessity will be served by the construction of the station. This application shall set forth such facts as the licensing authority by regulation may prescribe as to the citizenship, character, and the financial, technical, and other ability of the applicant to construct and operate the station, the ownership and location of the proposed station and of the station or stations with which it is proposed to communicate, the frequencies and wave length or wave lengths desired to be used, the hours of the day or other periods of time during which it is proposed to operate the station, the purpose for which the station is to be used, the type of transmitting apparatus to be used, the power to be used, the date upon which the station is expected to be completed and in operation, and such other information as the licensing authority may require. Such application shall be signed by the applicant under oath or affirmation.

Such permit for construction shall show specifically the earliest and latest dates between which the actual operation of such station is expected to begin, and shall provide that said permit will be automatically forfeited if the station is not ready for operation within the time specified or within such further time as the licensing authority may allow, unless prevented by causes not under the control of the grantee. The rights under any such permit shall not be assigned or otherwise transferred to any person, firm, company, or corporation without the approval of the licensing authority. A permit for construction shall not be required for Government stations, amateur stations, or stations upon mobile vessels, railroad rolling stock, or Upon the completion of any station for the construction or continued construction for which a permit has been granted, and upon it being made to appear to the licensing authority that all the terms, conditions, and obligations set forth in the application and permit have been fully met, and that no cause or circumstance arising or first coming to the knowledge of the licensing authority since the granting of the permit would, in the judgment of the licensing authority, make the operation of such station against the public interest, the licensing authority shall issue a license to the lawful holder of said permit for the operation of said station. Said license shall conform generally to the terms of said permit.

SEC. 22. The licensing authority is authorized to designate from time to time radio stations the communications or signals of which, in its opinion, are liable to interfere with the transmission or reception of distress signals of ships. Such stations are required to keep a licensed radio operator listening in on the wave lengths designated for signals of distress and radio communications relating thereto during the entire period the transmitter of such station is in operation.

Sec. 23. Every radio station on shipboard shall be equipped to transmit radio communications or signals of distress on the frequency or wave length specified by the licensing authority, with apparatus capable of transmitting and receiving messages over a distance of at least one hundred miles by day or night. When sending radio communications or signals of distress and radio communications relating thereto the transmitting set may be adjusted in such a manner as to produce a maximum of radiation irrespective of the amount of interference which may thus be caused.

All radio stations, including Government stations and stations on board foreign vessels when within the territorial waters of the United States, shall give absolute priority to radio communications or signals relating to ships in distress; shall cease all sending on frequencies or wave lengths which will interfere with hearing a radio communication or signal of distress, and, except when engaged in answering or aiding the ship in distress, shall refrain from sending any radio communications or signals until there is assurance that no interference will be caused with the radio communications or signals relating thereto, and shall assist the vessel in distress, so far as possible, by complying with its instructions.

SEC. 24. Every shore station open to general public service between the coast and vessels at sea shall be bound to exchange radio communications or signals with any ship station without distinction as to radio systems or instruments adopted by such stations, respectively, and each station on shipboard shall be bound to exchange radio communications or signals with any other station on shipboard without distinction as to radio systems or instruments adopted by each station.

SEC. 25. At all places where Government and private or commercial radio stations on land operate in such close proximity that interference with the work of Government stations can not be avoided when they are operating simultaneously such private or commercial stations as do interfere with the transmission or reception of radio communications or signals by the Government stations concerned shall not use their transmitters during the first fifteen minutes of each hour, local standard time.

The Government stations for which the above-mentioned division of time is established shall transmit radio communications or signals only during the first fifteen minutes of each hour, local standard time, except in case of signals or radio communications relating to vessels in distress and vessel requests for information as to course, location, or compass direction.

SEC. 26. In all circumstances, except in case of radio communications or signals relating to vessels in distress, all radio stations, including those owned and operated by the United States, shall use the minimum amount of power necessary to carry out the communication desired.

SEC. 27. No person receiving or assisting in receiving any radio communication shall divulge or publish the contents, substance, purport, effect, or meaning thereof except through authorized channels of transmission or reception to any person other than the addressee, his agent, or attorney, or to a telephone, telegraph, cable, or radio station employed or authorized to forward such radio communication to its destination, or to proper accounting or distributing officers of the various communicating centers over which the

radio communication may be passed, or to the master of a ship under whom he is serving, or in reponse to a subporna issued by a court of competent jurisdiction, or on demand of other lawful authority; and no person not being authorized by the sender shall intercept any message and divulge or publish the contents, substance, purport, effect, or meaning of such intercepted message to any person; and no person not being entitled thereto shall receive or assist in receiving any radio communication and use the same or any information therein contained for his own benefit or for the benefit of another not entitled thereto; and no person having received such intercepted radio communication or having become acquainted with the contents, substance, purport, effect, or meaning of the same or any part thereof, knowing that such information was so obtained, shall divulge or publish the contents, substance, purport, effect, or meaning of the same or any part thereof, or use the same or any information therein contained for his own benefit or for the benefit of another not entitled thereto: Provided, That this section shall not apply to the receiving, divulging, publishing, or utilizing the contents of any radio communication broadcasted or transmitted by amateurs or others for the use of the general public or relating to ships in distress.

Sec. 28. No person, firm, company, or corporation within the jurisdiction of the United States shall knowingly utter or transmit, or cause to be uttered or transmitted, any false or fraudulent signal of distress, or communication relating thereto, nor shall any broadcasting station rebroadcast the program or any part thereof of another broadcasting station without the express authority of the originating station.

SEC. 29. Nothing in this Act shall be understood or construcd to give the licensing authority the power of censorship over the radio communications or signals transmitted by any radio station, and no regulation or condition shall be promulgated or fixed by the licensing authority which shall interfere with the right of free speech by means of radio communications. No person within the jurisdiction of the United States shall utter any obscene, indecent, or profane language by means of radio communication.

SEC. 30. The Secretary of the Navy is hereby authorized unless restrained by international agreement, under the terms and conditions and at rates prescribed by him, which rates shall be just and reasonable, and which, upon complaint, shall be subject to review and revision by the Interstate Commerce Commission, to use all radio stations and apparatus, wherever located, owned by the United States and under the control of the Navy Department (a) for the reception and transmission of press messages offered by any newspaper published in the United States, its Territories or possessions, or published by citizens of the United States in foreign countries, or by any press association of the United States, and (b) for the reception and transmission of private commercial messages between ships, between ship and shore, between localities in Alaska and between Alaska and the continental United States: Provided, That the rates fixed for the reception and transmission of all such messages, other than press messages between the Pacific coast of the United States, Hawaii, Alaska, the Philippine Islands, and the Orient, and between the United States and the Virgin Islands, shall

not be less than the rates charged by privately owned and operated stations for like messages and service: Provided further, That the right to use such stations for any of the purposes named in this section shall terminate and cease as between any countries or localities or between any locality and privately operated ships whenever privately owned and operated stations are capable of meeting the normal communication requirements between such countries or localities or between any locality and privately operated ships, and the licensing authority shall have notified the Secretary of the Navy thereof.

SEC. 31. The expression "radio communication" or "radio communications" wherever used in this Act means any intelligence, message, signal, power, pictures, or communication of any nature transferred by electrical energy from one point to another without the aid of any wire connecting the points from and at which the electrical energy is sent or received and any system by means of which such transfer of energy is effected.

SEC. 32. Any person, firm, company, or corporation failing or refusing to observe or violating any rule, regulation, restriction, or condition made or imposed by the licensing authority under the authority of this Act or of any international radio convention or treaty ratified or adhered to by the United States, in addition to any other penalties provided by law, upon conviction thereof by a court of competent jurisdiction, shall be punished by fine of not more than \$500 for each and every offense.

Sec. 33. Any person, firm, company, or corporation who shall violate any provision of this Act, or shall knowingly make any false oath or affirmation in any affidavit required or authorized by this Act, or shall knowingly swear falsely to a material matter in any hearing authorized by this Act, upon conviction thereof in any court of competent jurisdiction shall be punished by a fine of not more than \$5,000 or by imprisonment for a term of not more than five years or both for each and every such offense.

SEC. 34. The trial of any offense under this Act shall be in the district in which it is committed; or if the offense is committed upon the high seas, or out of the jurisdiction of any particular State or district, the trial shall be in the district where the offender may be found or into which he shall be first brought.

SEC. 35. This Act shall not apply to the Philippine Islands or to the Canal Zone. In international radio matters the Philippine Islands and the Canal Zone shall be represented by the Secretary of State.

SEC. 36. The licensing authority is authorized to designate any officer or employee of any other department of the Government on duty in any Territory or possession of the United States other than the Philippine Islands and the Canal Zone, to render therein such services in connection with the administration of the radio laws of the United States as such authority may prescribe: *Provided*, That such designation shall be approved by the head of the department in which such person is employed.

Sec. 37. The unexpended balance of the moneys appropriated in the item for "wireless communication laws," under the caption "Bureau of Navigation" in Title III of the Act entitled "An Act making appropriations for the Departments of State and Justice and for the judiciary, and for the

Departments of Commerce and Labor, for the fiscal year ending June 30, 1927, and for other purposes," approved April 29, 1926, and the appropriation for the same purposes for the fiscal year ending June 30, 1928, shall be available both for expenditures incurred in the administration of this Act and for expenditures for the purposes specified in such items. There is hereby authorized to be appropriated for each fiscal year such sums as may be necessary for the administration of this Act and for the purposes specified in such item.

SEC. 38. If any provision of this Act or the application thereof to any person, firm, company, or corporation, or to any circumstances, is held invalid, the remainder of the Act and the application of such provision to other persons, firms, companies, or corporations, or to other circumstances, shall not be affected thereby.

SEC. 39. The Act entitled "An Act to regulate radio communication," approved August 13, 1912, the joint resolution to authorize the operation of Government-owned radio stations for the general public, and for other purposes, approved June 5, 1920, as amended, and the joint resolution entitled "Joint resolution limiting the time for which licenses for radio transmission may be granted, and for other purposes," approved December 8, 1926, are hereby repealed.

Such repeal, however, shall not affect any act done or any right accrued or any suit or proceeding had or commenced in any civil cause prior to said repeal, but all liabilities under said laws shall continue and may be enforced in the same manner as if committed; and all penalties, forfeitures, or liabilities incurred prior to taking effect hereof, under any law embraced in, changed, modified, or repealed by this Act, may be prosecuted and punished in the same manner and with the same effect as if this Act had not been passed.

Nothing in this section shall be construed as authorizing any person now using or operating any apparatus for the transmission of radio energy or radio communications or signals to continue such use except under and in accordance with this Act and with a license granted in accordance with the authority hereinbefore conferred.

SEC. 40. This Act shall take effect and be in force upon its passage and approval, except that for and during a period of sixty days after such approval no holder of a license or an extension thereof issued by the Secretary of Commerce under said Act of August 13, 1912, shall be subject to the penalties provided herein for operating a station without the license herein required.

Sec. 41. This Act may be referred to and cited as the Radio Act of 1927.

Approved, February 23, 1927.

INDEX

A		

Advertising, 7, 8, 27, 141

Air space, 15, 21

Amateur stations, 4, 6, 28, 54, 121

American Bar Association committee report, 66

Appeals, 75, 76

Artists, rights, 147

Attorney General, opinions, 36, 44, 49

Authors (see also Copyright).

rights of, 142, 146, 155

B

Bar Association Committee report, 66 Berlin Convention, 178 Blanketing, 109 specific (see also Broadcasting heads). assignment of frequencies, 36, 38. 76 chain, 171 classification of broadcasters, 7 condition 1926, 40 essential qualities, 6 law of Aug. 13, 1912, 34-46 listener pays no tax, 6 motives for, 7, 26-28 pioneer station, 8 rates, 8 sales of apparatus, 5 simultaneous, meaning, 171 Broadcast programs, artists, rights in, 147 authors, rights in, 142, 146, 155 control, 140, 152 non-original, rights in, 147 property in intangible, 148 public interest, 62

Broadcast programs, publication by,
134
reproduction, 142
rights, summary, 154
station owners, rights in, 142, 151
unfair competition, 151
Broadcasting stations (see also stations).
growth, 8
motive, 7, 26, 28
number, 3, 5
priorities between, 120

C

Call letters, 11, 182, 189, 190 Canada relations with, 183 Canal zone, stations in, 181 Carmichael v. Anderson, 38, 43, 44 Censorship, 50, 198 Chain broadcasting, 171 Chicago decision, 42 China, stations in, 181 City ordinances, 83 Civil rights, 50, 82 Conferences, 41, 57-58 Commerce, amateur communication, 28 broadcasting, 25 general, 22-31 interstate (See Interstate). marine communication, 25 opinion of Attorney General, 36 point-to-point communication, 24 profit not essential, 26 telegraph and telephone, 23 Commission, appeals, 75, 189 appointment, 55, 187 interference, regulation of, 119, 132 members, 55, 187 powers, 55, 187

Commission, term, 187 Communication a natural right, 14 Constitutional law, application to radio conditions, 65, 73, 75 commerce clause, 69 due process clause, 67 police power, 69, 87 report of committee, American Bar Association, 66 taking property without compensation, 65, 68-75 Construction permits, 77 Conventions (see International law). Copyright, common law, 143 statutory, broadcasting of copyright matter, 134 Remick and Company, Jerome H., v. American Automobile Accessories Company, 135, 137 General Electric Company, 136, 139 Witmark and Sons v. Bamberger and Company, 135 Court of Appeals of District of Columbia, appeal to, 75 Crosstalk, 109 Cujus est solum, ejus est usque ad coelum, 16

D

Declaration of London, 176
District Court of U. S., appeal to, 76
Due process clause (see Constitutional law).

E

Ether (see also Air space, 15-21) definition, 2, 15 no title in government, 16 ownership, 15, 16, 63

F

Federal jurisdiction, 22-31 (see also Commerce)

Frequencies, amateur bands, 39 assignment under law of 1912, 10, 38, 39 assignment under 1927 law, 76 broadcasting band, 10, 40 congestion, 8 definition, 9-10 European agreement, 184 government stations, 39 interference features, 108 international allocation, 183 rights in, 184 services, 11, 183 separation necessary, 10, 108 ship bands, 39 telegraph services, 11

G

Government stations, 39, 190, 197, 198

H

Harmonics, 109 Heterodynes, 109 Hoover v. Intercity Radio Company, 37, 41

Ī

Intangible property, rights in, 68, 148 Intelligence as commerce, 22-31 Interconnection, 170 Interference, blanketing, 109 city ordinances, 83 commission, powers of, 119, 132 description, 84, 108 duty to remove, 118 federal control over non-radio Bources, 90 harmonics, 109 heterodynes, 109 inadequate control period, 54 listener may complain, 110 malicious, 118 negligent, 117

	_	
Interference, noise nuisance, 89, 112 nuisance, 85	Interstate commerce, state powers, 91	
priority rights, 119-131 range, 109	Interstate Commerce Commission, 51	
regulation by states, 83	Italy, protocal with, 182	
sender may complain, 110	T	
"Sic Utere Tuo" doctrine, 111	J	
sources, 108	Joint resolution, Dec. 8, 1926, 64	
state jurisdiction, 81	_	
telephone, 124	K	
transmitting stations, 118	Kilocycles (see Frequencies).	
International law, call letters, 182	2110030100 (000 1 104 100 100)	
Canada, relations with, 183	L	
Canal Zone, stations in, 181	I and war noutrality convention	
China, stations in, 181	Land war neutrality convention,	
conventions, adaptation princi-	Law of Aug. 13, 1912	
ples Geneva, 176		
Berlin, 178	assignment of frequencies, 36, 38,	
land war, 175		
limitation of armaments, 177,	Attorney General opinions, 36, 44,	
181	,	
London, 176, 178–180	broadcasting, application to, 34 government stations, 64	
maritime warfare, 176	history, 32-34	
safety of life at sea, 180	ineffective, 50	
Cuba, radio conference, 184	interference provisions, 31, 39, 46	
Declaration of London, 176	license (see Station license).	
Definition, 175	operator's license, 46	
European agreement, 184	•	
Foreign territory, transmission	power assignments, 45 regulations, 46	
over, 182	report of Senate committee, 35	
Frequencies, rights in, 184	report of Merchant Marine com-	
Frequency allocation, 183	mittee, 36	
Italy, service with, 182 London convention, reservations,	scope, 34	
180	secrecy, 47	
Mexico, radio conference, 184	ships, 34	
sovereign rights, 184	state power, effect on, 50	
war-time, status of stations, 175	station licenses, duration, 47	
Washington conference, 1927, 185	effect, 73	
Interstate commerce, definition, 29	required, 34	
intelligence, 22-31	revocation, 47, 48	
intermingling with intrastate, 28-	time division, 38	
31	war time control, 48	
law of Aug. 13, 1912, 31	Law of 1927	
licensing power, 71	American Bar Association Com-	
police power of state, 82	mittee report, 66	
power of regulation, 71	appeals from commission, 75	
railroad analogy, 30	commission, 55	
	,	

Law of 1927 conditions when enacted, 54 construction permits, 77 frequency assignments, 76 general features, 54 history, 54 interference, 79 licenses, duration, 55 prerequisite, 61 limitations, 79 message of the President, 54 penalties, 56 power assignments, 77 public convenience, 59 rebroadcasting, 78 report of Senate Committee, 55 station location, 77 test, 186 time division, 77 war control, 79, 190 Libel and slander broadcasting, rule in, 166 broadcasting, simultaneous, 170 conclusion, 174 criminal liability, 173 distinction, 157-158, 160-162 due care rule, 163 joint liability, 162 liability for words of agents, 167 in absence of agency, 168 of broadcaster, 163 of speaker, 162 oral matter, 158 publication of written matter. 159 - 160radio facilities for defamation, 157 simultaneous, 170 telegraph cases, 164 venue, 162 written matter, 159 Licenses, conditions prerequisite, 56 duration, under 1912 Law, 47, 55 under 1927 Law, 55 effect under 1912 Law, 73 issuance under 1912 Law, 36 operators', 46 public convenience, 56 required, under 1912 Law, 38

Licenses, required, under 1927 Law, 55
termination by 1927 Law, 55, 73
Listener, interest dominant, 58
interference, 108
number, 6
tax, 6
Location of stations determination, 77
state control, 90
London convention, 176, 178, 180
London declaration, 180

M

Manufacturing plants, investment in, 6 Marine service, general statement, 3 Messages secrecy, law of 1912, 47 law of 1927, 197 Minneapolis ordinance, 8 Minot ordinance, 83

N

Nuisances interference, 85, 117 legislative declaration, 86 noise, 89, 112

0

Operators licenses under law, 46, 189

P

Point-to-point communication, 3 in commerce, 24
Point to point stations, as public utilities, 93
service, liability for libel, 166
Police power extent, 69, 87
interference, 83, 87
Portland ordinance, 83
Power assignments, 45, 77
Present conditions, 1, 8
President's message, Dec. 7, 1926, 54
government stations, 190

Remick and Co., Jerome H. v. Priorities, ancient analogy, 132 General Electric Company, 136, application to broadcasting stations, 120 element in public convenience, Rights, limitation on, 21 to engage in radio communicainterest, or necessity, 62 tion, 14 general instances, 129 ice analogy, 128 8 rights from, 120 telephone analogy, 124 Sales of radio apparatus, 5 Tribune Company v. Oak Leaves Broadcasting Station, Inc., Secrecy, 47, 197 Secretary of Commerce, conferences, 41. 57-58 trade-mark analogy, 123 discretionary power under law of water-right analogy, 121 Programs (see Broadcast programs). 1912, 36 frequency assignments under law Public convenience, interest or neof 1912, 36, 38, 45 cessity, definition, 59 powers under 1927 law, 55, 188, effect on broadcasting licenses, 61 189 elements, 56 Selectivity, 10 history of, in radio, 57 Service (see marine, transoceanic, meaning as applied to radio, 61 novel in radio law, 56 Ships, apparatus requirement, 32 priority as an element, 62 assignment for frequencies under Public utilities, amateur stations, 93 law of 1912, 36, 38, 45 broadcasting, application of rules, foreign, 32 99, 102 interstate commerce commission stations, 93-94 jurisdiction, 51 public interest, meaning, 95 law of 1912, 32 radio stations generally, 92 operators required, 32 summary, 102 vessels equipped Jan. 1, 1927, 3 telegraphic services, 93 Shore stations, assignment of fre-R quencies under law of 1912, 39 Sic Utere Tuo doctrine, 111 Radio act of 1912 (see Law of 1912) Slander (see libel and slander). of 1927 (see Law of 1927) State jurisdiction (see also Public waves, entry on property, 18 utilities). Rates, 8, 52 city ordinances, 83 Rebroadcasting, 78, 171 interference, control over, 82 libel and slander, 170 Receiving sets, investment in, 6 interstate commerce, 91 number, 6 legislative power, 81 radiating, 109 location of stations, 90 nuisances, 85, 87 selectivity, 10 Regulation (see Interstate commerce police power, 82 under law of 1912, 50 and specific heads). Stations (see also specific heads). Remick and Co., Jerome H. v. classification, 3, 7 American Automobile Accesgovernment, 39, 190, 197, 198 sories Company, 135, 137

Stations, growth, 8 inspection, 189 location, 77, 90 motive for broadcasting, 7, 26, 28 number, 3, 5 owner's right in broadcast programs, 142, 151 pioneer station, 8 priorities between, 120 rates, 8 reputation, 141 war control, 48, 79, 190 Statutes Act of June 18, 1910, 51 of June 24, 1910, 32 of Aug. 13, 1912, 45 of 1927, 54, 186 Joint Resolution, Dec. 8, 1926, 64 Transportation Act of 1920, 74

Т

Taking of property without compensation, 65, 68-75

Tax, none on receivers, 6

Telephony, application of law of 1912, 34
general statement, 5

Time Division law of 1912, 38
of 1927, 77, 188
limitation, 102

Transmitting stations (see Stations).

Transoccanic service, 4
Transportation act of 1920, 57
Trespass by radio waves, 18
Tribune Company v. Oak Leaves
Broadcasting Station, Inc., 45,
63, 129

U

Unfair competition, 151 U. S. v. Zenith Radio Corporation, 42

V

Vested rights (see Constitutional law and waiver).

$\cdot \mathbf{w}$

Waiver, joint resolution, Dec. 8, 1926, 64
radio act of 1927, 63, 189
requirements, 63
War control of stations, 48, 79, 190
Washington Conference of 1927, 185
Wavelengths (see Frequencies).
Witmark and Sons v. Bamberger and
Company, 135

 \mathbf{z}

Zenith case, 42