



MonaMotor Oil



An Appreciation

From President F. H. Searle of the MonaMotor Oil Co.

THE MonaMotor Oil Co. is very glad to send you this revised edition of its Radio Log Book. I am sure you will find it most welcome, as it contains a complete list of all broadcasting stations in the United States operating on 500 watts or more, giving their call letters, location, frequency and wave length.

It is most gratifying to be able to say that the really tremendous demand for this Log Book, several hundred thousand of which have been distributed, comes from listeners who have been entertained by Station KOIL, owned and operated by the MonaMotor Oil Co. at Council Bluffs, or from those who have enjoyed programs given from a dozen other high class stations in different parts of the country, and broadcast for the MonaMotor Oil Co. An occasional brief mention of the fact that the log was available, brought this flood of requests.

We are indeed happy to know that we have contributed to your enjoyment through KOIL or its associate stations, and we trust you will continue to tune in regularly on our programs.

The entertainment afforded by KOIL is of the highest type, and so greatly diversified as to appeal to every listener. Religious services, markets, weather forecasts, news items, classical and popular music and programs received over the network of the great Columbia chain from the New York studios are only a few of the features regularly offered. You may tune in at pleasure with the assurance of hearing something really worth while—and that nothing of the slightest objectionable nature will ever come to you from its microphones.

KOIL, like all other powerful radio stations, is operated in the hope of creating good will for, and promoting the use and sale of, the many products of our company. The expense involved is heavy; and the only possible return is the increased demand for our products by listeners who thus show their appreciation of the entertainment made available to them without cost. The increase in our sales is very tangible evidence indeed that our listeners do show such appreciation. For this spirit of good will we extend our warmest thanks.

As time passes we try to serve you better and better. Your kindly comment and constructive criticism of our efforts to entertain you, will be most welcome. May we have this—and, if you use and like them, a friendly word of endorsement of our products to your friends? Thank you!

Cordially yours,



FRED H. SEARLE

President of the MonaMotor Oil Co.;
President of the Toledo Automobile Club,
Official of A. A. A.

F. H. SEARLE,
President MonaMotor Oil Co.



Who Pays for Broadcasting?

The prediction is frequently made that broadcast listeners eventually must pay some kind of tax for their radio entertainment, because of the heavy expense of erecting and operating powerful stations like KOIL.

The MonaMotor Oil Co. sincerely hopes that no direct tax ever will be levied on receiving sets in this country. We believe the present system of free service to listeners is much preferable to a paid service.

In the final analysis, radio broadcasting is good-will advertising. The great national advertisers, such as the MonaMotor Oil Co., employ it freely—and profitably—as the ever increasing use of this powerful medium seems to indicate.

The MonaMotor Oil Co. is glad to set aside, annually, a large amount of money to be spent in providing for the listeners of KOIL, entertainment of the highest type. This service is provided for you in the belief that you appreciate being able to tune in at pleasure, and to enjoy the good things which are sent to you, without cost or obligation, as well in the day time as in the evening hours.

Our listeners can express their appreciation of this entertainment and at the same time insure themselves of the permanency of broadcasting, by asking for MonaMotor Oil and other products of this company, when purchasing such supplies. Try them, at least—we know you will find them more than acceptable. You will profit through the use of these superior products; we in turn shall profit by their increased sale, and thus be able to give you, month by month, programs of increasing merit.

We shall appreciate this co-operation—and a friendly word to your friends in our behalf. May we have this?

MonaMotor Oil Co.



The Future of Broadcasting

It is a far cry from the crude apparatus with which Marconi sent his first three dots" across the Atlantic by "wireless telegraphy" some twenty-odd years ago, to the highly developed broadcasting station of today.

Music and voice now are transmitted with absolute fidelity over tremendous distances. "Chain" broadcasting no longer is a novelty and KOIL is now the Western link of the new Columbia chain, which is presenting the finest programs ever broadcast. The "short wave" has made possible telephonic communication between America and Europe, with almost the same ease with which we talk across the continent. This winter it is promised that the "short wave" will bring to us, from Europe, musical programs by some of the finest Old World bands and orchestras, through inter-continental chain broadcasting.

Nor is this all: Television, although not perfected, is an accomplished fact. We may now "see" through a wire as well as by means of radio waves, and at some date, possibly not very remote, we may sit in our homes and "tune in" the music of an operatic performance, as well as an actual view of the action on the stage! We may actually see great sporting events, where we now can only hear them described for us by the announcer.

KOIL Soon to Have New Short Wave Transmitter

Radio Station KOIL has been licensed by the Federal Radio Commission to operate a "short wave" transmitter, which will be put in use, in all probability, in the near future. This does not mean that we shall discontinue our regular broadcasting transmitter, but that we will **broadcast simultaneously on both a long and a short wave.**

KOIL thus becomes the fifth station in the United States and the only one west of Cincinnati, to broadcast regularly on two widely separated waves at the same time. Station KDKA was the pioneer in this practice, followed a little later by WGY of Schenectady. WABC of Richmond Hill, N. Y., secured the third license, and WLW of Cincinnati the fourth. KOIL is therefore among the pioneers in this new field.

Short waves travel over immense distances during the daylight hours, as well as at night. They are practically free from interference by "static" and tune very much more sharply than regular broadcast wavelengths. While they cannot be heard on the average standard broadcast receiver, which tunes only from 200 to 550 meters, short wave receivers are inexpensive and simple to operate. Several "standard" receivers are now built with interchangeable coils, enabling their owners to receive either long or short waves at pleasure.

Experience has shown that "short waves" travel to Africa or the North Pole with the same ease with which they traverse a few hundred miles, and programs from KOIL will, after the new transmitter is installed, reach practically all parts of the world.



The MonaMotor Oil Company Entertains You From Many Radio Stations

While Radio Station KOIL is one of the high powered stations of the country, weather conditions often make it impossible to receive our programs satisfactorily at great distances from the station.

We have therefore arranged with a number of other high class stations, located in different parts of the country, to present enjoyable programs at frequent intervals for your entertainment.

It is our ambition to have MonaMotor products, as well as MonaMotor entertainment, within easy reach of every person in the United States. The distribution of MonaMotor Oil is now nation wide, through the best independent dealers in each locality. You are invited to test the perfection of this product in your automobile, tractor, truck or airplane engine. It will not disappoint you — neither will any of our other products, many of which you will find listed on another page.

You are also cordially invited to listen to our special programs, broadcast from the following stations, on the days and at the hours given below. We are sure you will find them all highly enjoyable:

- KFH—Wichita, Kas., Wednesdays, 8:00 to 9:00 P. M., C. T.
- KFCR—Santa Barbara, Cal., Thursdays, 8:00 to 9:00 P. M., P. T.
- KFRC—San Francisco, Cal., Thursdays, 8:00 to 9:00 P. M., P. T.
- KFUM—Colorado Springs, Colo., Thursdays, 8:00 to 9:00 P. M., M. T.
- KFWB—Hollywood, Cal., Saturdays, 8:00 to 9:00 P. M., P. T.
- KMED—Medford, Ore., Wednesdays, 8:00 to 9:00 P. M., M. T.
- KMMJ—Clay Center, Neb., Half hour musical program weekly.
- WAMD—Minneapolis, Minn., Tuesdays and Thursdays, 7:00 to 7:30 P. M., C. T.
- WHB—Kansas City, Mo., 2nd and 4th Tuesdays each month, 9:00 to 10:00 P. M., C. T.
- WLW—Cincinnati, Ohio, Saturdays, 7:00 to 8:00 P. M., E. T.
- WNAX—Yankton, So. Dak., Thursdays, 1:00 to 1:30 P. M., C. T.
- WSKC—Bay City, Mich., Mondays, 9:00 to 9:30 P. M., C. T.
- WTAQ—Eau Claire, Wisc., Thursdays, 10:00 to 11:00 P. M., C. T.



Mona Motor Oil



BROADCASTING STATION WAVELENGTHS

Station	City and State	Kilo Cycles	Meter	Watt Power	Dials		
					1	2	3
*KOIL	Council Bluffs, Ia. (S. W.)	940	319.0	5000			
KDKA	E. Pittsburgh, Pa. (S. W.)	950	315.6	50000			
‡KELW	Burbank, Cal.	1310	228.9	500			
KEX	Portland, Ore.	1250	239.9	2500			
*KFAB	Lincoln, Nebr.	940	319.0	5000			
KFAD	Phoenix, Ariz.	1100	272.6	500			
‡KFAU	Boise, Idaho	1050	285.5	2000			
KFBU	Laramie, Wyo.	620	483.6	500			
KFCR	Santa Barbara	1420	211.1	50			
*KFDM	Beaumont, Tex.	620	483.6	500			
*KFDY	Brookings, So. Dak.	550	545.1	500			
KFEQ	St. Joseph, Mo.	1300	230.6	1000			
KFH	Wichita, Kas.	1220	245.8	500			
KFI	Los Angeles, Cal.	640	468.5	5000			
‡KFJF	Oklahoma City, Okla.	1100	272.6	750			
‡KFKB	Milford, Kas.	1240	241.8	1500			
*KFKU	Lawrence, Kas.	1180	254.1	500			
KFKX	Chicago, Ill.	570	526.0	2500			
*KFMX	Northfield, Minn.	1270	236.1	500			
†KFNF	Shenandoah, Ia.	650	461.3	2000			
KFOA	Seattle, Wash.	670	447.5	1000			
KFON	Long Beach, Cal.	1240	241.8	500			
*KFQB	Ft. Worth, Tex.	900	333.1	1000			
KFRC	San Francisco	660	454.3	1000			
KFRU	Columbia, Mo.	1200	249.9	500			
KFSD	San Diego, Cal.	680	440.9	500			
KFSG	Los Angeles, Cal.	1090	275.1	500			
KFUL	Galveston, Tex.	1160	258.5	500			
*KFUM	Colorado Springs, Colo.	1060	282.8	1000			
‡*KFUO	St. Louis, Mo.	1280	234.2	1000			
KFUR	Ogden, Utah	1330	225.4	500			
KFWB	Los Angeles, Cal.	830	361.2	500			
KFWI	San Francisco, Cal.	1120	267.7	500			
‡KFWM	Oakland, Cal.	1270	236.1	500			
*KFXF	Denver, Colo.	1060	282.8	500			
KGA	Spokane, Wash.	1150	260.7	2000			
KGEF	Los Angeles, Cal.	1140	263.0	500			
KGO	Oakland, Cal.	780	384.4	5000			
KGW	Portland, Ore.	610	491.5	1000			
KHJ	Los Angeles, Cal.	720	416.4	500			
KHQ	Spokane, Wash.	810	370.2	1000			
*KJR	Seattle, Wash.	860	348.6	2500			

*Divides time with other stations.

‡Additional power is permitted during daylight hours.

||Presents a weekly program for the MonaMotor Oil Company.

†Operates day time only.

(S. W.) Also operates simultaneously on short wave.



MonaMotor Oil Co. Products

"The Crest of the Best"—Since 1889

Many people who tune in their favorite stations with the aid of this little log book—and this is particularly true of grandfathers—will recall the "Monarch" and "Sunlight" brands of axle grease, so widely known in the by-gone days when "Old Dobbin" furnished the family motive power. Today, in thousands of families, three generations still are using these old-time lubricants.

The Monarch Manufacturing Co. (now the MonaMotor Oil Co.) originated those brands 38 years ago—and today, strange as it may seem to many readers, they still are selling in greater volume than ever. The business of the company now is nation-wide, and includes the manufacture of more than 100 different lubricants for all purposes, as well as oil and grease dispensing equipment, and many specialties.

Below are listed some of these products—some of which are daily used in almost every city and farm home in the country. We ask your kindly consideration of these, when purchasing similar merchandise. Your patronage will be the most cordial approval of our efforts to entertain you, and will contribute to the assurance of the permanency of broadcasting over KOIL and associated stations.

MonaMotor Oils for Autos, Trucks, Tractors, Diesel Engines, and Aeroplanes.

Industrial Oils for every purpose

(Steam cylinder, machine, valve, compressor, turbine, dynamo, soluble, screw-cutting, lard, and ice-machine oils).

Farm Oils for every purpose

(Harvester, castor, journal, separator, crude, hog, medicated-hog, and harness oils).

Miscellaneous Oils for various uses

(Black, floor, track and curve, paraffine, flushing, worm-gear, transmission, concrete form, clutch, and spring and penetrating oils).

Sunlight, Monarch, Electric and Slickery Axle Greases.

Gold Medal Cup Greases.

Oil and Greasing Handling and Dispensing Equipment.

MonaMotor Greases for every purpose

(Hard oil, cup, transmission and differential, chassis, spicer-universal joint, and water pump greases).

Special greases

(Semi-fluid, fibre, bull gear, curve, axelite ball-bearing, mine-car, rock drill, and medicated hog greases).

KOIL Chemical Products

(Fly and moth killer, insect killer for cattle, creosote coal tar dip, and sanitary floor dressing).

KOIL Spark Plugs and Spark Plug Wires.

Glyco Distilled Radiator Glycerine.

Miscellaneous Products

(Mechanic's Hand Soap, Pure Linseed and Potash Soap, Belt Stick, Belt Dressing, Valve Grinding Compound, Sweeping Compound, Roof Cement, Wood Preserver, and Corrosion Cure).



Mona Motor Oil



List of Broadcasting Stations—Continued

Station	City and State	Kilo Cycles	Meter	Watt Power	Dials		
					1	2	3
KLDS	Independence, Mo.	1110	270.1	1500			
KLX	Oakland, Cal.	590	508.2	500			
†KLZ	Denver, Colo.	1010	296.9	500			
*KMA	Shenandoah, Ia.	760	394.5	1000			
‡KMED	Medford, Ore.	1200	249.9	50			
*KMMJ	Clay Center, Nebr.	1050	285.5	500			
KMOX	St. Louis, Mo.	1000	299.8	5000			
KMTR	Hollywood, Cal.	570	526.0	500			
KNRC	Santa Monica, Cal.	800	374.8	500			
KNX	Los Angeles, Cal.	890	336.9	500			
†KOA	Denver, Colo.	920	325.9	2500			
KOAC	Corvallis, Ore.	1110	270.1	500			
‡*KOB	State College, N. M.	760	394.5	5000			
KPLA	Los Angeles, Cal.	1190	252.0	500			
*KOIL	Council Bluffs, Ia. (S. W.)	940	319.0	5000			
KOIN	Portland, Ore.	940	319.0	1000			
KOMO	Seattle, Wash.	980	305.9	1000			
KOWW	Walla Walla, Wash.	1000	299.8	500			
KPO	San Francisco, Cal.	710	422.3	1000			
KPRC	Houston, Tex.	1020	293.9	500			
KPSN	Pasadena, Cal.	950	315.6	1000			
*KQV	Pittsburgh, Pa.	1110	270.1	500			
KQW	San Jose, Cal.	1010	296.9	500			
*KRLD	Dallas, Tex.	650	461.3	500			
KSAC	Manhattan, Kas.	900	333.1	500			
KSBA	Shreveport, La.	1120	267.7	1000			
‡*KSCJ	Sioux City, Ia.	1230	243.8	500			
KSD	St. Louis, Mo.	550	545.1	500			
KSL	Salt Lake City, Utah	990	302.8	1000			
KSO	Clarinda, Ia.	1320	227.1	500			
KTAB	Oakland, Cal.	1070	280.2	500			
KTBI	Los Angeles, Cal.	1040	288.3	500			
KTHS	Hot Springs, Ark.	780	384.4	1000			
†KTNT	Muscatine, Ia.	1170	256.3	1000			
KTSA	San Antonio, Tex.	1130	265.3	2000			
*KTW	Seattle, Wash.	760	394.5	1000			
KUOA	Fayetteville, Ark.	1010	296.9	500			
KUOM	Missoula, Mont.	650	461.3	500			
KUT	Austin, Tex.	1290	232.4	500			
KVOO	Bristow, Okla.	860	348.6	1000			
*†KWK	St. Louis, Mo.	1280	234.2	1000			
*KWKH	Shreveport, La.	760	394.5	1000			

*Divides time with other stations.

†Additional power is permitted during daylight hours.
(S. W.) Also operates simultaneously on short wave.



Oil In a Can Is Like a Race Horse in a Stall

Lubricating oil in a bottle or a can may look fine. So may a race horse in a stall. But put that horse on a track—make him run half a mile—and he may prove to be “all looks and nothing else.” The same is true of motor oils. Looks, color and extravagant claims mean nothing at all. It is the test of actual performance that shows up poor horses—and poor oil.

An oil at room temperature may have plenty of body. But your motor doesn't work at room temperature. Its heat is around 350 degrees. An oil that will protect it must maintain a body sufficient to provide lubrication at this heat. Otherwise your motor suffers terrific wear.

MonaMotor Oil Does Not Break Down Under Heat

This super-purified oil is the most perfect motor lubricant known, because it is processed far beyond the point where other oils are considered “good enough.” Made from 100 per cent paraffine base crude, it is put through the Searle Purification Process, which gives a purity never before known and makes it the highest grade oil in the world.

MonaMotor Oil is so thoroughly refined that it is 98 per cent resistant to hard carbon formation, and 95 per cent resistant to crankcase moisture. It practically ends your carbon and “sludging” troubles, and stands up longer, under hard driving, than any other known oil.

Try a filling in your crankcase. If you do not then believe it is the best oil you ever used, the dealer who supplied it will return your money on request. And—it costs no more than competing oils of lower quality.



Mona Motor Oil



List of Broadcasting Stations—Continued

Station	City and State	Kilo Cycles	Meter	Watt Power	Dials		
					1	2	3
*KWSC	Pullman, Wash.	760	394.5	500			
*KWUC	LeMars, Ia.	1230	243.8	1500			
KWWG	Brownsville, Tex.	1080	277.6	500			
*KXA	Seattle, Wash.	860	348.6	500			
KYA	San Francisco, Cal.	970	309.1	500			
*KYW	Chicago, Ill.	570	526.0	2500			
*WAAF	Chicago, Ill.	770	389.4	500			
*WAAM	Newark, N. J.	1120	267.7	250			
†WAAW	Omaha, Nebr.	680	440.9	500			
‡WABC	Richmond Hill, N.Y. (S.W.)	970	309.1	2500			
WADC	Akron, O.	1260	238.0	1000			
*WAIU	Columbus, Ohio	1060	282.8	5000			
*WAMD	Minneapolis, Minn.	1350	222.1	500			
WAPI	Auburn, Ala.	880	340.7	1000			
*WARS	Brooklyn, N. Y.	1320	227.1	500			
*WBAA	W. Lafayette, Ind.	1100	272.6	500			
†WBAK	Harrisburgh, Pa.	1000	299.8	500			
WBAL	Baltimore, Md.	1050	285.5	5000			
*WBAP	Ft. Worth, Tex.	600	499.7	5000			
WBAW	Nashville, Tenn.	1250	239.9	500			
*WBBC	Brooklyn, N. Y.	1320	227.1	500			
*WBBM	Chicago, Ill.	770	389.4	5000			
*WBBR	Rossville, N. Y.	1170	256.3	1000			
*WBET	Medford, Mass.	1040	288.3	500			
*WBIS	Boston, Mass.	650	461.3	500			
*WBNY	New York, N. Y.	1270	236.1	500			
*WBOQ	Richmond Hill, N. Y.	970	309.1	500			
WBRL	Tilton, N. H.	1290	232.4	500			
†WBT	Charlotte, N. C.	1160	258.5	500			
*WBZA	East Springfield, Mass.	900	333.1	15000			
*WBZA	Boston, Mass.	900	333.1	500			
WCAC	Mansfield, Conn.	1090	275.1	500			
†WCAD	Canton, N. Y.	1230	243.8	500			
WCAE	Pittsburgh, Pa.	650	461.3	500			
†WCAJ	Lincoln, Nebr.	790	379.5	500			
*WCAL	Northfield, Minn.	1050	285.5	500			
*WCAM	Camden, N. J.	1340	223.7	500			
WCAP	Ashbury Park, N. J.	1250	239.9	500			
WCAU	Philadelphia, Pa.	1150	260.7	500			
*WCBD	Zion, Ill.	870	344.6	5000			
†WCCO	Minneapolis, Minn.	740	405.2	5000			
*WCFL	Chicago, Ill.	620	483.6	1500			

*Divides time with other stations.

†Additional power is permitted during daylight hours.

‡Presents a weekly program for the MonaMotor Oil Company.

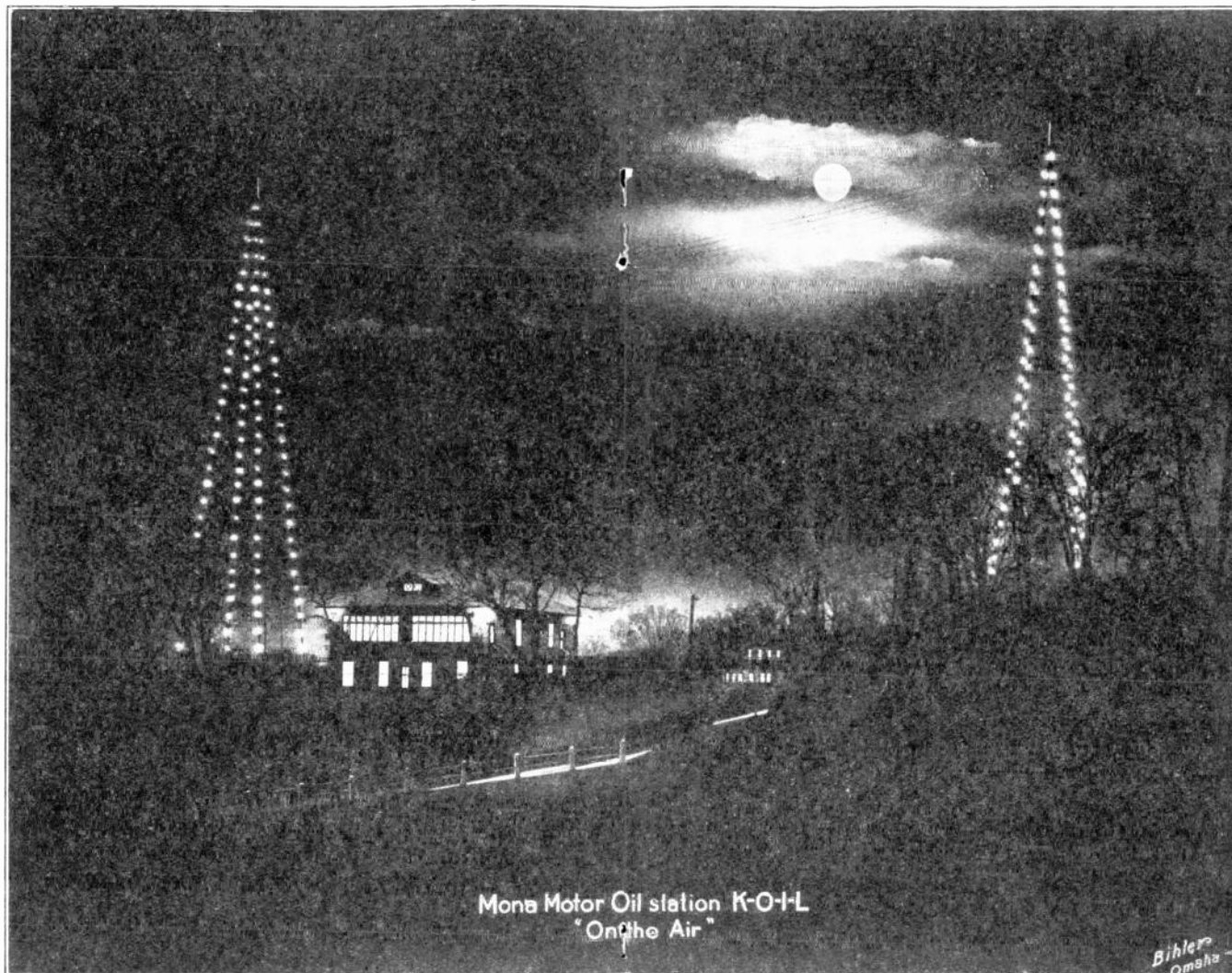
†Operates day time only.

(S. W.) Also operates simultaneously on short wave.



KOIL STAFF—

Manager—
 Don Searle
Commercial Representative—
 Howard Martin
Publicity Director—
 George Wood
Chief Announcer—
 Bob Hall
Announcer—
 Bill Mahoney
Hostess:
 Anita DeWitt Hall
Women's Activities:
 Patricia Caughlin
KOIL Chaplain—
 J. R. "Jake" Perkins
 Pastor 1st Congregational Church
Old Mother Hubbard—
 Anita DeWitt Hall
Chief Engineer—
 Gordon Anderson
Engineer and Operator—
 Kenneth Shirk
Engineer—
 Earl Kelly
"Uncle Jack"—
 Lou Miller
MonaMotor Oil Twins—
 John Wolfe
 Ned Tollinger
Director Ambassadors—
 Don Larson
Station Organists—
 Maxson Webb
 Marguerite Morehouse
"Mose and Charley"—
 Harold Hughes
 Joe Simonson
"Billy and Helen"—
 Harold Marshall
 Helen Wilson
Dramatic Director—
 Chas. R. Docherty
Dramatic and Feature Writers—
 Chas. E. Duffie
 Gene McCaig
 Jim DeWitt
 Harry C. Browne
 Edward Murphy



When dusk comes down upon the town,
 When evening shadows creep,
 When flowers fold their petals
 And softly fall asleep:

Then lights wink out upon the hill,
 Like twinkling fairy eyes,
 To guide the song of radio
 On its journey thru the skies.

LISTEN FOR—

"Billy and Helen"
 Fridays at 9 P. M. C. T.
"Mose and Charley"
 Mondays at 11 P. M.
Old Folks at Home
 Fridays at 9:45 P. M.
Weekly Sermon—J. R. Perkins
 Sundays at 11 A. M.
Afternoon Leisure Hour
 Every day from
 3:00 to 4:00 P. M.
Dinner Concerts
 Every day Except
 Saturdays, 6 P. M.
Weather Forecast
 Every day 10:57 A. M. and
 7:00 P. M.
U. S. Radio Farm School
 Farm Flashes
Aunt Sammy
 Every day except Sunday
 10 A. M.
Live Stock and Feed Markets
 Every Day Except Sunday
 5:15 P. M.
Council Bluffs Nonpareil
 News Period
 Daily 7:30 A. M. —
 5:20 P. M.
Continuity Musical Programs
 As Announced
Feature Programs
 As Announced
Sponsored Programs
 As Announced
Farm Features
 As Announced
Baseball and Sporting News
 As Announced
Programs of the Columbia Chain from our New York Studios

List of Broadcasting Stations—Continued

Station	City and State	Kilo Cycles	Meter	Watt Power	Dials		
					1	2	3
*WCGU	Coney Island, N. Y.	1370	218.8	500			
WCMA	Culver, Ind.	1150	260.7	500			
WCOA	Pensacola, Fla.	1200	249.9	500			
*WCRW	Chicago, Ill.	1340	223.7	500			
WCSH	Portland, Me.	820	365.5	500			
WCSO	Springfield, O.	1170	256.3	500			
*WCWK	Fort Wayne, Ind.	1310	228.9	500			
*WCX	Pontiac, Mich.	680	440.9	5000			
WDAD	Nashville, Tenn.	1330	225.4	1000			
WDAE	Tampa, Fla.	1120	267.7	500			
WDAF	Kansas City, Mo.	810	370.2	1000			
*‡WDBO	Orlando, Fla.	1040	288.3	500			
*WDGY	Minneapolis, Minn.	1050	285.5	500			
*WDOD	Chattanooga, Tenn.	1230	243.8	500			
WDRC	New Haven, Conn.	1060	282.8	500			
*WDWF	Cranston, R. I.	1150	260.7	250			
WEAF	New York, N. Y.	610	491.5	50000			
WEAN	Providence, R. I.	1090	275.1	500			
*WEAO	Columbus, O.	1060	282.8	750			
*WEAR	Cleveland, O.	750	399.8	1000			
*WEBH	Chicago, Ill.	820	365.6	500			
*WEBJ	New York, N. Y.	1170	256.3	500			
WEBW	Beloit, Wis.	1160	258.5	500			
*WEDC	Chicago, Ill.	1240	241.8	500			
WEEI	Boston, Mass.	590	508.2	500			
*WEMC	Berrien Springs, Mich.	620	483.6	1000			
*WENR	Chicago, Ill.	1040	288.3	500			
*WEVD	New York, N. Y.	1220	245.8	500			
‡WEW	St. Louis, Mo.	850	352.7	1000			
WFAA	Dallas, Tex.	550	545.1	500			
*WFAN	Philadelphia, Pa.	1340	223.7	500			
WFBL	Syracuse, N. Y.	1160	258.5	750			
*WFBM	Indianapolis, Ind.	1090	275.1	1000			
*WFI	Philadelphia, Pa.	740	405.2	500			
‡WFIW	Hopkinsville, Ky.	1150	260.7	500			
WFJC	Akron, Ohio			500			
*WFKB	Chicago, Ill.	1340	223.7	500			
*WFLA	Clearwater, Fla.	580	516.9	750			
*WGBS	Astoria, N. Y.	860	348.6	500			
*WGCP	Newark, N. J.	1120	267.7	250			
*WGES	Chicago, Ill.	1240	241.8	500			
*WGHP	Detroit, Mich.	1080	277.6	750			

*Divides time with other stations.
‡Additional power is permitted during daylight hours.
(S. W.) Also operates simultaneously on short wave.
†Operates day time only.

Why MonaMotor Oil Is Made So Pure

Carbon has long been admitted to be the motorist's worst foe. But, because carbon is present in large quantities in both gasoline and lubricating oil, it has been accepted as a necessary evil—and expense. Now we know better.

The real carbon is released as a fine, dry powder, when oil or gasoline burns in a motor cylinder. If there were no impurities in the oil this excess carbon would be blown out of the exhaust, and "carbon trouble" will be unknown.

But there are many impurities in all lubricating oil, excepting MonaMotor Oil. These are of a varnish-like nature—sticky and non-volatile. They catch and hold both the carbon released from oil and gasoline and the road dust drawn into the cylinders with air from the carburetor. Then this mixture bakes into a hard mass which we call carbon, but which really is "motor clinker."

MonaMotor Oil is Super-purified for Your Protection

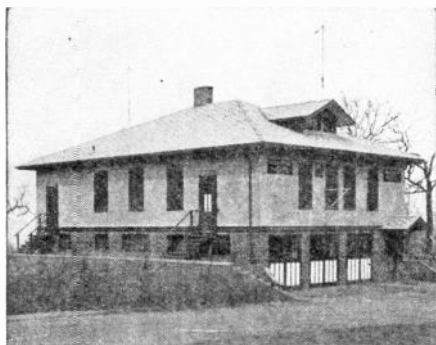
MonaMotor Oil is super-purified. The gummy impurities (glutoleumoids) are removed. Consequently it is fully 98 per cent proof against hard "motor clinker" or carbon.

The same process that removes the varnish-like impurities also makes it 95 per cent resistant to crankcase condensation, and to "sludging." But that is not all. It has greater resistance to crankcase dilution than any other known oil. It has greater resistance to breakdown of body from heat.

With all these advantages, it costs you no more than competing oils. A test in your own motor will prove its superiority more quickly than any other.

And remember—your dealer will refund your money if MonaMotor Oil is not more than satisfactory to you.

A Visit to K-O-I-L

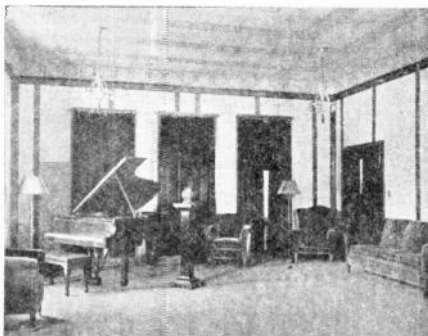


Station Home

The MonaMotor Oil Co. can modestly claim the distinction of being the first to construct a building exclusively for radio-broadcasting. The station home of KOIL was built in the spring of 1925, and is situated on the highest bluff overlooking the Missouri River. Its electrically lighted towers are a landmark guide to the air-mail for miles.

KOIL maintains two exclusive studios in Council Bluffs and fourteen remote pick-up points in Omaha and Council Bluffs. This is in addition to the 50 remote control points in New York City used regularly by KOIL as a member of the Columbia Broadcasting System.

Our Hill Top Studio is spacious and so designed as to exclude all foreign noises and still pick up every sound within its walls.



"Hill-Top" Studios

At the Studio Home, visitors are first met in the reception room. The MonaMotor Oil Co. entertains thousands every month at the broadcasting building in addition to the countless thousands who listen in every night.

KOIL is one of the "show-places" of Council Bluffs. Visitors are always welcome.



Reception Room



Mona Motor Oil



List of Broadcasting Stations—Continued

Station	City and State	Kilo Cycles	Meter	Watt Power	Dials		
					1	2	3
†WGL	New York, N. Y.	1020	293.9	1000			
*WGN	Chicago, Ill.	720	416.4	15000			
WGR	Buffalo, N. Y.	990	302.8	750			
*WGST	Atlanta, Ga.	1110	270.1	500			
WGW	Milwaukee, Wis.	1370	218.8	500			
WGY	Schenectady, N. Y. (S. W.)	790	379.5	50000			
*WHA	Madison, Wis.	900	333.1	750			
*WHAD	Milwaukee, Wis.	1020	293.9	500			
WHAM	Rochester, N. Y.	1070	280.2	5000			
*WHAP	New York, N. Y.	1270	236.1	1000			
*WHAR	Atlantic City, N. J.	1100	272.6	1000			
WHAS	Louisville, Ky.	930	322.4	500			
**WHAZ	Troy, N. Y.	980	305.9	500			
* WHB	Kansas City, Mo.	880	340.7	500			
*WHDI	Minneapolis, Minn.	1220	245.8	500			
*WHEC	Rochester, N. Y.	1180	254.1	500			
†WHK	Cleveland, Ohio	1130	265.3	500			
*WHN	New York, N. Y.	760	394.5	500			
WHO	Des Moines, Ia.	560	535.4	5000			
*WHT	Chicago, Ill.	980	305.9	5000			
*WIBO	Chicago, Ill.	980	305.9	5000			
*WICC	Sport Hill, Conn.	1130	265.3	500			
WIOD	Miami Beach, Fla.	1210	247.8	1000			
*WIP	Philadelphia, Pa.	860	348.6	500			
*WJAD	Waco, Tex.	900	333.1	500			
WJAR	Providence, R. I.	620	483.6	500			
*WJAS	Pittsburgh, Pa.	1110	270.1	500			
WJAX	Jacksonville, Fla.	880	340.7	1000			
*WJAY	Cleveland, Ohio	1320	227.1	500			
*WJAZ	Mt. Prospect, Ill.	1140	263.0	5000			
*WJBT	Chicago, Ill.	770	389.4	500			
*WJJD	Mooseheart, Ill.	820	365.6	1000			
*WJKS	Gary, Ind.	1290	232.4	500			
*WJR	Pontiac, Mich.	680	440.9	5000			
WJZ	Bound Brook, N. J.	660	454.3	30000			
†*WKAR	E. Lansing, Mich.	1080	277.6	500			
WKBH	LaCrosse, Wis.	1360	220.4	500			
*WKBO	Jersey City, N. J.	1370	218.8	500			
*WKBQ	New York, N. Y.	1370	218.8	500			
†WKBW	Buffalo, N. Y.	1380	217.3	500			
WKRC	Cincinnati, Ohio	1220	245.8	500			
*WLB	Minneapolis, Minn.	1220	245.8	500			

*Divides time with other stations.

†Additional power is permitted during daylight hours.

||Presents a weekly program for the Mona Motor Oil Company.

(S. W.) Also operates simultaneously on short wave.

**Monday nights only.



Monamotor Oil



A Few of the Folks at KOIL



KENNETH SHIRK
Asst Operator



GORDON ANDERSON
Chief Operator



EARL KELLY
Engineer

This is the operating staff at KOIL. Although not often thought of by listeners, they are the men behind the guns. Expert and thorough in all they do. Operating and building equipment are the jobs they like.



DON SEARLE
Manager of KOIL



BOB HALL
Chief Announcer



ANITA HALL
Hostess



HOWIE MARTIN
Announcer



GEORGE WOOD
Announcer

These are the people you hear. Always at your service



MonaMotor Oil



List of Broadcasting Stations—Continued

Station	City and State	Kilo Cycles	Meter	Watt Power	Dials		
					1	2	3
WLAC	Nashville, Tenn.	1330	225.4	1000			
‡ *WLBI	Stevens Point, Wis.	900	333.1	1000			
WLBW	Oil City, Pa.	1020	293.9	500			
*WLIB	Chicago, Ill.	720	416.4	500			
*WLIT	Philadelphia, Pa.	740	405.2	500			
*WLS	Chicago, Ill.	870	344.6	5000			
*WLSI	Cranston, R. I.	1150	260.7	250			
WLW	Cincinnati, Ohio (S. W.)	700	428.3	5000			
*WLWL	New York, N. Y.	810	370.2	1000			
*WMAC	Cazenovia, N. Y.	1330	225.4	500			
**WMAF	So. Dartmouth, Mass.	700	428.3	500			
WMAK	Lockport, N. Y.	550	545.1	750			
WMAL	Washington, D. C.	1240	241.8	500			
*WMAQ	Chicago, Ill.	670	447.5	1000			
*WMAZ	Macon, Ga.	1110	270.1	500			
*WMBB	Chicago, Ill.	1190	252.0	5000			
*WMBF	Miami Beach, Fla.	780	384.4	500			
*WMBI	Chicago, Ill.	1140	263.0	500			
WMC	Memphis, Tenn.	580	516.9	500			
*WMCA	New York, N. Y.	810	370.2	500			
*WNAC	Boston, Mass.	650	461.3	500			
WNAD	Norman, Okla.	1250	239.9	500			
WNAX	Yankton, So. Dak.	1080	277.6	1000			
*WNJ	Newark, N. J.	1120	267.7	250			
WNOX	Knoxville, Tenn.	1130	265.3	1000			
WNRC	Greensboro, N. C.	1340	223.7	250			
WNYC	New York, N. Y.	570	526.0	500			
*WOAI	San Antonio, Tex.	600	499.7	5000			
WOAN	Lawrenceburg, Tenn.	1250	239.9	500			
*WOAX	Trenton, N. J.	1250	239.9	500			
WOC	Davenport, Ia.	800	374.8	5000			
*WODA	Patterson, N. J.	1020	293.9	1000			
‡ WOI	Ames, Ia.	1130	265.3	2500			
*WOK	Chicago, Ill.	1190	252.0	5000			
WOKT	Rochester, N. Y.	1430	209.7	500			
*WOO	Philadelphia, Pa.	860	348.6	500			
WOOD	Grand Rapids, Mich.	1150	260.7	500			
WOR	Newark, N. J.	710	422.3	500			
*WORD	Batavia, Ill.	1190	252.0	5000			
*WOS	Jefferson City, Mo.	830	361.2	500			
WOW	Omaha, Nebr.	590	508.2	1000			
*WOWO	Fort Wayne, Ind.	1310	228.9	1000			

*Divides time with other stations.

‡Additional power is permitted during daylight hours.

**Summer months only.

†Daytime only.



JOHN WOLFE

—The MonaMotor Oil Twins—

NED TOLLINGER

Here are the MonaMotor Oil Twins—John Wolfe and Ned Tollinger. These popular entertainers are the only traveling team representing a radio station in this country, and undoubtedly are one of the best known teams of entertainers on the air today.

The twins have traveled the country from coast to coast, and from Canada to the Gulf of Mexico. They have entertained from more than one hundred of the principal stations in the United States, and are constantly in receipt of invitations to make additional appearances, both at stations where they have previously entertained, and at those they have not yet visited.

We are sure you will enjoy the entertainment provided by these popular singers and story tellers. It is impossible here to give their route, but if you will tune into the following stations, from time to time, you will undoubtedly find them on the air:

KJR, KFOA, KHQ, KMO, KGW, KEX, KGA, KGO, KPO, KWG, KFRC, KOW, KMJ, KFWH, KFWO, KFWB, KFON, KNX, KHJ, KIX, KOA, KFKX, KFEO, KLZ, KFXF, KFH, KVOO, KFPB, KWOR, KFAB, KMMJ, KFOR, KMOX, KTHS, KTNT, KFNE, KMA, KSO, KOIL, KFSD, KPSN, KFWV, KWCR, KFUM, KSCJ, KSOO.

WTAQ, WJAG, WEAU, WKY, WHB, WRR, WHO, WAMD, WCAL, WKAF, WSOE, WJAZ, WGES, WEBH, WJJD, WQJ, WBBM,

WIBA, WSKC, WOOD, WJR, WCX, WREO, WGHP, WTAL, WHBF, WJBL, WJBC, WSBT, WGBF, WHBH, WFBM, WOWO, WRAF, WLW, WADC, WHK, WEAQ, WSMK, WJBK, WOI, WSBC, WAFD, WTMJ, WWJ, WOR, WEAN, WNAC, WFBL, WMAK, WCAU, WJAS, WAIU, WKRC, WMAQ, WCAD.

CNRV, CKCD, CFCN, CNRW, CTCT, CKFC, CNRU, CKOC.



List of Broadcasting Stations—Continued

Station	City and State	Kilo Cycles	Meter	Watt Power	Dials		
					1	2	3
*WPAP	Cliffside, N. J.	760	394.5	500			
*WPCC	Chicago, Ill.	1340	223.7	500			
*WPCH	Hoboken, N. J.	920	325.9	500			
*WPG	Atlantic City, N. J.	1100	272.6	5000			
†*WPSC	State College, Pa.	1000	299.8	500			
WPTF	Raleigh, N. C.	720	416.4	500			
WPUB	New York, N. Y.	1270	236.1	500			
WQAA	Parkersburg, Pa.	1390	215.7	500			
*WQAM	Miami, Fla.	780	384.4	750			
*WQAO	Cliffside, N. J.	760	394.5	500			
*WQJ	Chicago, Ill.	670	447.5	500			
WRC	Washington, D. C.	640	468.5	500			
*WREN	Lawrence, Kas.	1180	254.1	750			
WRHM	Minneapolis, Minn.	1150	260.7	1000			
†WRM	Urbana, Ill.	1100	272.6	500			
WRNY	New York, N. Y.	920	325.9	500			
*WRR	Dallas, Tex.	650	461.3	500			
WRVA	Richmond, Va.	1180	254.1	1000			
*WSAI	Cincinnati, Ohio.	830	361.2	5000			
WSB	Atlanta, Ga.	630	475.9	1000			
*WSBC	Chicago, Ill.	1290	232.4	500			
WSBT	South Bend, Ind.	1260	238.0	500			
WSEA	Virginia Beach, Va.	1140	263.0	500			
WSKC	Bay City, Mich.	1100	272.6	250			
WSM	Nashville, Tenn.	890	336.9	5000			
WSMB	New Orleans, La.	1010	296.9	750			
WSOE	Milwaukee, Wis.	1110	270.1	500			
*WSUF	Suffolk, Va.	1270	236.1	500			
WSUI	Iowa City, Ia.	630	475.9	500			
*WSUN	Clearwater, Fla.	580	516.9	750			
*WSYR	Syracuse, N. Y.	1330	225.4	500			
WTAG	Worcester, Mass.	580	516.9	250			
†*WTAM	Cleveland, O.	750	399.8	3500			
WTAQ	Eau Claire, Wis.	1180	254.1	500			
WTAR	Norfolk, Va.	1140	263.0	500			
*WTAS	Elgin, Ill.	1090	275.1	500			
*WTAW	College Station, Tex.	620	483.6	500			
WTIC	Hartford, Conn.	560	535.4	500			
*WTMJ	Milwaukee, Wis.	1020	293.9	1000			
*WWAE	Chicago, Ill.	1320	227.1	500			
WWJ	Detroit, Mich.	850	352.7	1000			
WWL	New Orleans, La.	1220	245.8	500			
WWNC	Asheville, N. C.	1010	296.9	1000			

*Divides time with other stations ‡Additional power is permitted during daylight hours.
 ||Presents a weekly program for the MonaMotor Oil Company.



MonaMotor Oil Is Made Under a Patented Process

MonaMotor Oil is made under a patented process which has been declared by lubricating engineers to be "THE MOST OUTSTANDING LUBRICATING DEVELOPMENT OF THE AUTOMOTIVE AGE", making possible an oil of heretofore unknown purity. This process (protected by U. S. Patent No. 1,600,845) produces an oil that is actually commercially pure—**pure lubricant** that wears longer, protects better and keeps motors more clean than any other known oil. It has been tested and endorsed by the builders of the leading automobiles, tractors and trucks as an approved lubricant for their machines.

You Would Not Knowingly Put Sand Into Your Crankcase Oil

Yet, when you pour into your motor an oil that contains a large percentage of "glutoleumoids" (gummy impurities) you are in effect doing that very thing. These impurities are in all oils (excepting MonaMotor Oil) in surprising quantities. They are sticky, gummy particles that do not burn away in your firing chamber.

They gather on the pistons, valves and other parts, where they sizzle and fry under the intense heat. Every particle of road dust which touches them is caught and held. Some of this bakes into motor clinker (carbon); some of it is washed down into the crankcase when you use your choke in starting—and then you really have "sand" in your crankcase oil. You know what that means.

MonaMotor Oil is so pure that it is 98 per cent resistant to this destructive action. Use it in **your** motor. You will have little or no carbon trouble—no trouble with condensation—no trouble with sludging—no clogged oil lines—no balky oil pump.

But you will have smaller repair bills, less expense and a motor you will delight in driving. The patented process does all this for you—at an actual saving in your cost for lubricating oil. Prove it by a trial.



“The House Behind the Goods”

MonaMotor Oil Company products are not new, nor is the house behind them young and inexperienced. The MonaMotor Oil company was founded in 1889—38 years ago—and has enjoyed a steady and healthful growth each succeeding year.

The company has large plants in Council Bluffs, Ia., and Toledo, O., with large distributing branches at San Francisco and Los Angeles, Cal., and Vancouver, B. C. It is an **independent** company, distributing its products entirely through the best independent dealers in all parts of the continent. It is, in fact, not only one of the oldest, but is also one of the largest independent oil manufacturers and distributors in the country.

Neither the dealer nor the consumer takes the slightest risk in handling or using any of the many products which come from the plants of this company. Each knows that every article is backed by a guarantee of absolute satisfaction—backed by a concern of ample responsibility as well as the disposition to make good every word of its guarantee—and to do it cheerfully.

MonaMotor Oil dealers are selected with unusual care. Every one is of unquestioned integrity and ability. They are protected in their rights as representatives of the company—and in turn must protect their customers just as carefully. Dealers who display MonaMotor Oil signs are prepared to furnish you with genuine MonaMotor Oil—and to supply the correct grade or weight of any lubricant to meet the specific needs of your car. In a word our signs at a dealer's place of business are your **protection**. They mean that he handles, not merely **some** MonaMotor Oils and greases, but that he knows what **your** car best needs, and can supply it, and will not substitute some other brand.

Any MonaMotor Oil dealer will gladly show you how he draws from the **original, sealed container**, the oil that you need for your car.

Buy MonaMotor Oil company products with the certainty that you will be pleased with them, or that you can get your money back—with a smile—on request.

“The House Behind the Goods” guarantees this to you.



KOIL Presents Musical Programs For Others

Radio Station KOIL invites your attention to the fact that it offers you splendid programs sponsored by the MonaMotor Oil Company, and by many other leading business institutions as well. Among those who thus contribute to your entertainment are the following:

John G. Woodward & Co., Council Bluffs, Iowa—Manufacturers of Woodward's Famous Inner Circle Candies.

Reliance Battery Products Co., Council Bluffs, Iowa—Macmyr Batteries.

Shepard Laboratories, Council Bluffs, Ia.—Shep's Household Spray, Shep's Barnyard Spray and Shep's Plant Spray.

Crosley Radio Corporation, Cincinnati, O.—Crosley Radio Receiving Sets and Musicone Loud Speakers.

Gillette Rubber Co., Eau Claire, Wis.—Gillette Tires and Tubes.

Warner Bros. Pictures, Inc., New York City — "Classics of the Screen."

Sweeney Automotive and Electrical School, Kansas City, Mo.—Automotive and Electrical Instruction.

Hotel Lassen, Wichita, Kans.—"One of the Finest Hotels in the Middle West."

Santa Barbara Chamber of Commerce, Santa Barbara, Cal.

Bowen-Shields Chemical Co., Council Bluffs, Iowa—Makers of Marvel Concentrated Liquid Medicines for Swine and Poultry.

M. M. Johnson Co., Clay Center, Neb.—Makers of Old Trusty Incubator.

Corley Mountain Highway, Colorado Springs, Colo.—The beautiful toll highway from Colorado Springs to Cripple Creek.

World's Star Knitting Co., Bay City, Mich.—Makers of World's Star Hosiery and Klean Knit Underwear.

National Lead Battery Co., St. Paul, Minn.—Makers of National Batteries.

Gurney Seed & Nursery Co., Yankton, So. Dak. — Seeds, Trees and Baby Chicks that grow and satisfy.

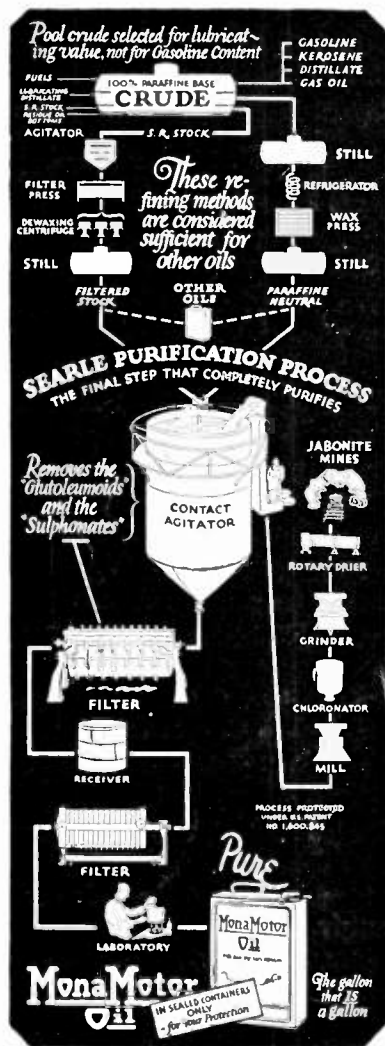
Medford Chamber of Commerce of Airport of Medford, Southern Oregon and on the Paved Pacific Highway.

You can support Radio Broadcasting by patronizing those concerns which contribute to your entertainment.

How MonaMotor Oil is Super-Purified

(Under Patent No. 1,600,845)

This chart graphically (not actually) shows how **MonaMotor Oil** is super-refined by the **Searle Purification Process**, under Patent No. 1,600,845 which no other manufacturer can use. We must be brief here, but will gladly send detailed explanation to anyone who will write for it. The chart shows:



A crude oil still. About 6 per cent of the contents is recovered as "steam refined (S. R.) stock oil." This passes to an agitator for further treating; then to a filter press; next to a unit which removes the wax contained in all oil; and finally to a second still from which it comes as a finished cylinder "stock" oil.

The lubricating "distillate" from the first still is treated in much the same manner, yielding a "neutral" oil. Stock and neutral oils are then compounded to give lubricating oil of any desired weight or body. The finished product of all other manufacturers than the MonaMotor Oil Co. is represented by the container labeled "Other Oils."

The Searle Purification Process **begins where others finish.** The oil as finished by others is pumped to a huge agitator where it is mixed with a peculiar mineral (Jabonite) after the latter is mined, dried, ground, chlorinated and reground. The mixture is then heated to high temperatures and agitated for long periods. Jabonite is the most perfect oil purifying substance yet discovered.

From the agitator the mixture passes to a filter press where the Jabonite and impurities it has absorbed are separated from the oil, which then flows to a receiver, then to another filter which removes the last remaining impurities. Oil is then drawn into shipping containers after being tested at the laboratory and its quality approved by our chemists.

Remember—every operation of the Searle Purification Process is an **added** step, employed by no other manufacturer. That is why MonaMotor Oil is so supremely superior.

Try it in your crankcase. It is worth more, but costs no more than other oils.