

#### **Avery Manufacturing Company catalog**

Section 1, Pages 1 - 30

This catalog was published by Avery Manufacturing Company advertising their engines, threshers, self feeders, pneumatic straw stackers, water tanks, and farm machinery. All of the pages of the catalog have illustrations and text about the equipment being advertised. There is an index on page 64 and the front and back covers are in color. The company was located in Peoria, Illinois, but it is assumed the catalog was distributed to Kansas farmers.

Creator: Avery Manufacturing Company

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# KANSAS HISTORICAL SOCIETY





### **Avery Manufacturing Company catalog**

JAN 3 0 1974 Dr. J. R. Combs

### Avery Manufacturing Company

PEORIA, ILLINOIS, U.S.A.

Cable Address "Avery-Peoria."

We are pleased to submit to you our 1906 Thresher Catalogue, with full confidence that you will be interested in our many new machines, as well as in the numerous improvements we have added to our standard "YELLOW FELLOW" LINE. In calling your special attention to the new improvements, we wish you to remember that we have not had need to improve our machines to cover deficiencies, but instead, have added new improvements to machines that were already excellent, to make them more nearly perfect. It is, furthermore, our purpose to continue to build such reliable machinery that the name "Avery" shall always stand for all that honesty in material and construction can mean

We do not fear, when prospective buyers wish to have proof as to what an "Avery" will actually do, to refer them to users of our machines, who are always the best and most impartial judges of results in operation. We have, accordingly, let them tell in their own words about the "Avery" in the field, and you will find that they testify that an "Avery" embodies every feature which you would wish useh a machine to prospess.

Our geographical situation is superb. The rates for the many roads from Peoria being most favorable.



It is OUF policy to keep in direct touch with our thresher customers. We sell largely through our own branches and salesmen with the assistance of local agents, so that all advantages from direct dealing belong to users of our machines. We keep a good supply of machines and repairs at all our branch houses and other distributing points, and pride ourselves on giving prompt and intelligent attention to repair orders, though, if you buy "Avery" machinery you need very few repairs indeed.

General Thresher Supplies.—In order that threshermen, who have heretofore experienced difficulty in getting reliable General Thresher Supplies, may have an opportunity of getting supplies of the "Avery" grade at reasonable prices, we have decided to issue a special Thresher Supply Catalogue. We can recommend the supplies which we list therein, in the highest terms, and solicit investigation of their quality and our prices.

We greatly appreciate having our customers visit us personally, at our branch houses or at our home office, whenever it is possible for them to do so, and see the "Home of the Yellow Fellows."



#### BRANCH HOUSES:

KANSAS CITY, MO.

DES MOINES, IOWA. ST. LOUIS, MO.

OMAHA, NEB. ST. LOUIS, MO. Haug Bros. & Nellermoe Co., Winnipeg, Manitoba.

MINNEAPOLIS, MINN. GRAND FORKS, N. D.

FARGO, N. D. INDIANAPOLIS, IND.

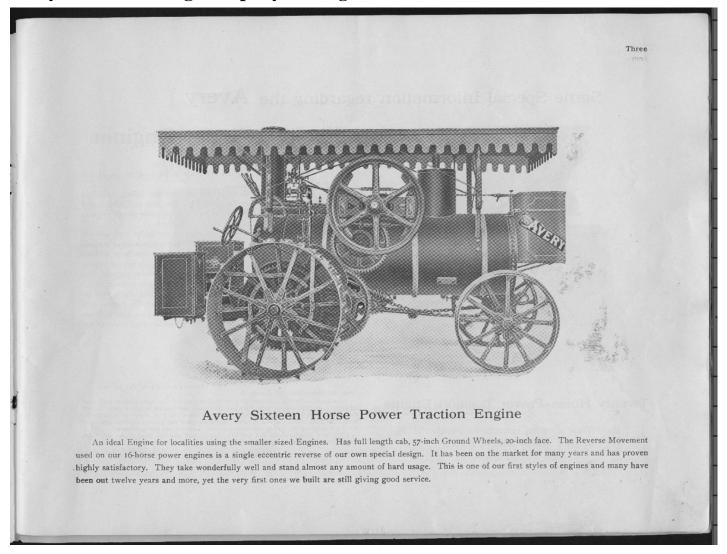
Export Office, 2 and 4 Stone Street, New York City

NSAS STATE HISTORICAL SOCIETY







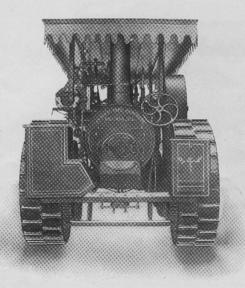




### **Avery Manufacturing Company catalog**

Four

#### Some Special Information regarding the Avery



#### Twenty Horse-Power Traction Engine

Rear View showing convenient position of steering wheel, throttle, reverse and friction levers.

### Single Cylinder Engines

Avery Single Cylinder Engines are made in sizes 14, 16, 20, 25 and 30 horse-power.

These engines have a full water front, return flue boiler, which insures great economy of fuel and water. They are both easily fired, and easy steamers. The front tank on the 14 and 16 horse-power engines holds 90 gallons; those on the larger sizes 120 gallons.

The 14 horse-power engines are furnished regularly with 16-inch rear ground wheels; the 16 and 20 horse-power engines have 20-inch rear ground wheels; the 25 and 30 horse-power engines have 26-inch rear ground wheels. We are also prepared to furnish, on special orders, wheels with 26-inch face on the 14, 16 and 20 horse-power engines, also wheels with 30-inch face on the 20, 25 and 30 horse-power engines.

On all Avery engines the guide wheel and fly wheel are located on the same side of the engine, hence it is easy to line up the engine with the separator. The throttle lever, reverse lever, friction clutch lever, foot brake, pump, injector and lubricator are all within easy reach of the engineer without leaving his position.

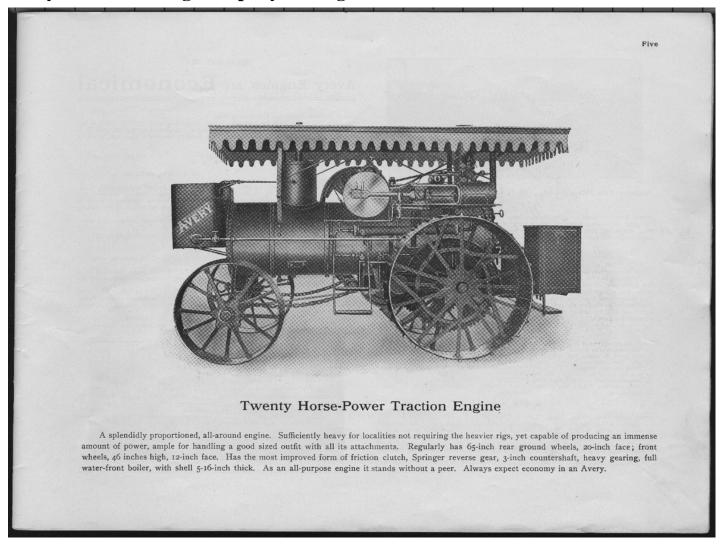
CANNON FALLS, MINN., Oct. 18, 1905.

Gentlemen.—Having used one of your "Yellow Fellows" for eight seasons with good satisfaction to ourselves as well as to our customers, we decided to get a new "Yellow Fellow" this year, which we have purchased of your agent, Mr. J. M. Orton of Minneapolis, Minn., last June. This machine is now in operation every day (except Sundays and rainy days) and is giving the best of satisfaction to both ourselves and our customers.

The new cylinder grate and the IXL Device, and also the Shoe Shake, are three great improvements in the new "Yellow Fellow."

Yours truly, CHAS. EDSTROM, AUG. HAGGSTROM.







#### **Avery Manufacturing Company catalog**

Six



Plagmann Bros., Marengo, Ia., 16 H. P. Avery Engine and 32x54 Separator

Marengo, Ia., Oct. 26, 1905.

AVERY MANUFACTURING CO, Des Moines, Iowa.

Dear Sirs:—The Avery rig bought of your agent, F. C. Watson, consisting of 16-horse engine and 32x5e-separator, with feeder, weigher and, wind stacker, is giving good satisfaction. We have not had the least bit of trouble toths our rig all fall.

Yours truly,

PLAGMANN BROS.

PLAGMANN BROS.

÷ ÷ • • • • LARNED, KANS., Dec. 4, 1905.

AVERY MANUFACTURING CO., Kansas City, Mo.

Gentlemen:—Will say your 1/2 P. B. undermounted plow engine is the best engine that I ever saw, or run. We threshed 50,000 binshels and never had one cent repairs put on it. She was always ready to run. The engineer had run all makes of engines and he liked it far better than any other. There were some parties up to see it from St. John. They wanted to see how the gear was connected and how much it was worn. We showed everything to them and they thought it was the best plow engine they had seen; they were old threshers.

I. C. MASSEY.

J C. MASSEY. \* \* \* \* \* \* IRENE, S. D., Jan. 26, 1906.

AVERY MANUFACTURING Co., Peoria, III.

Gentlemen:—In regard to the Avery people, I thought I would write a few words to you about threshing last fall. I run 52 days and booked \$8200.62 with the Yellow Fellow. The separator is 42x70 with self feeder and wind stacker, 22—26 horse-power engine is an easy steamer. We burned only 1600 lbs. of coal a day and have threshed up to 4,000 bu. of oats a day. The separator is a last thresher. I have lots of time had a strong cylinder. I have lots of times run a pitchfork through it and have not done a bit of harm.

Yours truly,

OLE HOLST.

+ + + + + LABRLLE, Mo., July 10, 1905.

Avery Manufacturing Co., Peoria, Ill.

Gentlemen:—in regard to my Avery ontift would say, I think a have the best outfit in this part of the country. I have threshed for 20 years. The engine is the best oll purpose engine I have ever seen. I am running four saws at the same time with my 30 H. P. enging, one 54 inch, one 30 inch, one 38 inch and one 16 inch saw, and plenty of power. Can saw 5,000 feet one inch boards. I will have a picture taken of my threshing outfit and send one to you as seen as convenient.

Yours truly,

H. H. BRONSON.

USERS SAY THAT

#### Avery Engines are Economical

AVERY MANUFACTURING Co., Des Moines, Iowa.

Dear Sirs.—The little rig I bought of your salesman in 1904 is O. K. This is my second Avery rig, and Avery s. good enough for me. My customers used to take out a ton of coal, and I didn't use half of it. They couldn't understand that; said it was a whole lot different from other makes.

Yours truly,

CHAS FOSSEN.

. . . . .

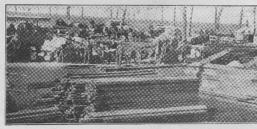
St. Anthons, Nr. 20, St. 20

Сніслдо, Ілл., Dec. 29, 1905.

AVERY MANUFACTURING Co., Peoria, III.

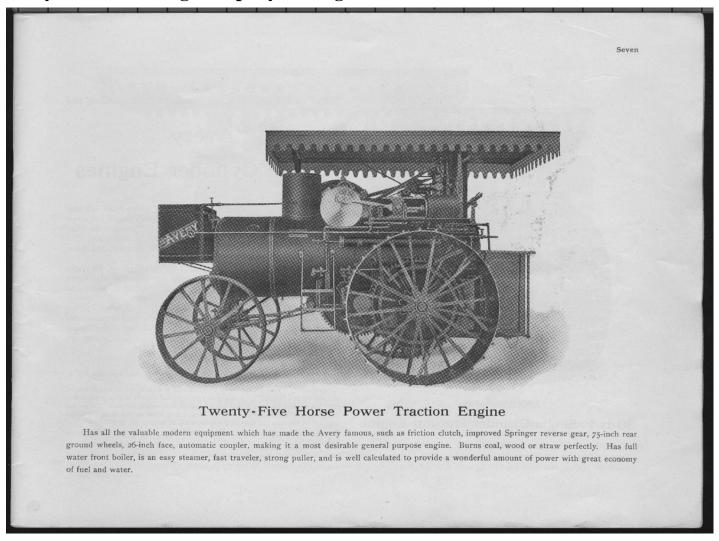
Gentlemen:—I wish to tell you how we got along with our outfit, consisting of a 22 H. P. Avery engine and a 42xyo separator with blower, weigher, and feeder, which we bought of your agents, Mr. Coats and Sam Ras.

I will say that the ma.hine is a daisy for doing good work, fast and clean. We have had not one complaint all fall with our customers. The engine is the best steamer I ever saw. The expense of the engine wise to cents, and it is ready to go into the field again next season. Wishing you a Happy New Year, I am,



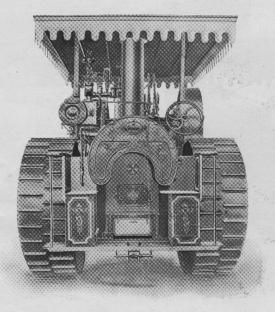
H. H. Bronson, Labelle, Mo., running four saws with his "best all purpose" 20 H.P. Engine







### **Avery Manufacturing Company catalog**



Rear View of our 30 H.P. Single Cylinder Traction Engine

Some additional Special Information regarding the

### Avery Single Cylinder Engines

Our single engines are all provided with the Latest Form and Best Design of Friction Clutch, and the construction is such that no end thrust is applied to the line shaft when operating, which thus prevents the wearing out of the collar on the sleeve, and also the disc wheel and box. The shoes recede from the rim a full inch when out of operation, and there-fore there is no danger of jerking or catching.

The Reverse Movement, as designed by us for use on the Avery

Engines, fully overcomes the disadvantages experienced in other forms of mechanisms contrived for this purpose. See special description on

The Bull Gears and the Rear Ground Wheels on the Avery Engines are each fitted on the axle independent of the other and are connected in such a manner that the gearing cannot be thrown out of line by any springing of the Ground Wheels.

STEWARD, ILL., Sept. 14, 1905.

Gentlemen:—I have got the —— people skinned to death in this section of country.

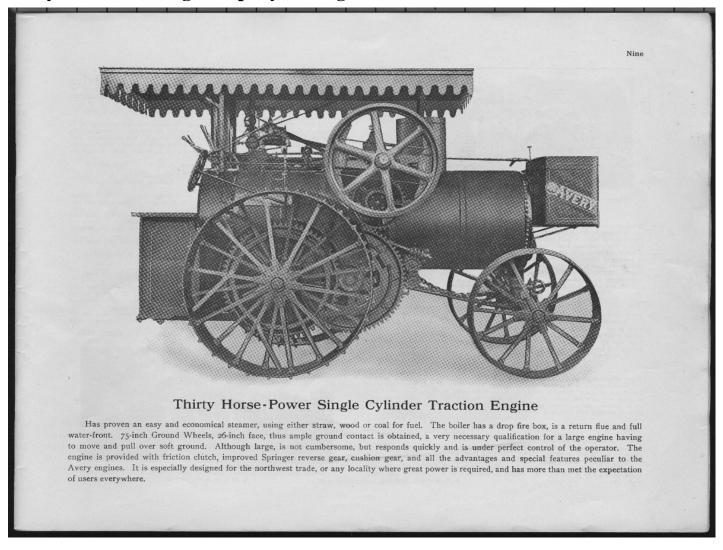
My best run this fall was, I commenced at 7:15 a. m. and finished at 5:40 p. m., and by night had threshed 6,470 bu. of oats and I lost some time waiting for straw. I think that was pretty good for the "Yellow Fellow." Now, I have proof for this if anyone doesn't believe it. I can show him the man I threshed the grain for.

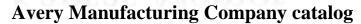
Yours respectfully.

FED. DATIM

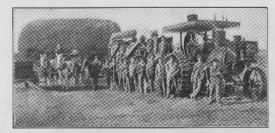
Yours respectfully,











Heinlein Bros., Cannon Falls, Minn., who are "first in the field and the last to get through"

CANNON FALLS, MINN., Nov. 5,1905.

CANNON FALLS, MINN., Nov. 5,1905.

AVERY MANUTACTURING Co., Minneapolis, Minn.

In regard to the 30 H. P. Avery engine that we bought this year, she's a daisy. The engine is well made, a good puller on the road or on the belt, and will use the least water of any engine around here. You should see the condition the straw is in. here, wet through and some of it nearly rotted to manure, but at the same time we had no trouble in keeping up steam. Our fireman finds it very casy. And the 75-inch ground wheels with the 36-inch face is just the right thing, boys, we can go almost any place without any trouble. We cannot recommend our outfit too highly, and will be glad to answer any inquiries you may send us.

We are in the field first and the last ones to get through.

Yours truly,

\*\*\* \*\*\* \*\*\*\*

HEINLEIN BROS.

ours truly,

+ + + + +

GOTHENBURG, NEB., Nov. 18, 1905.

AVERY MANUFACTURING CO., Peoria, Ill.

Gorillemen:—The Avery rig we bought of you in 1899 is all O. K. yet. I intended to write sooner, but neglected it. The rig alone talks for itself and runs just as good this fall as ut did seven years ago. And I purchased a rig from Mr. Brooks last year, so that I am now the owner of two complete Avery rigs, 22 II. P. engine and 36x6 separator, and am well pleased with them both. They are a money maker to threshermen and farmers. Wishing you success, we are,

Wishing you success, we are,

\*\*Averymuta N. D. Oct. 14, 2005.

NORTHVILLE, S. D., Oct. 14, 1905.

NORTHVILLE, S. D., Oct. 14, 1953.

Gentlemen:—I wish to state that I think the Avery goods all right in every respect. I have run an Avery threshing outfit for six years, threshing in all kinds and conditions of grain, and Aver not jound them wonting in any respect. My outfit now consists of a 4xx64 separator and a 30-horse engine, both Avery make, and I wish to state that I don't think of taking a back scat for a while yet.

Yours very truly,

Yours Very truly,

SALEM, IND., Apr. 7, 1905.

Avery Manufacturing Co., Indianapolis, Ind.

Gentlemen:—Road Contractors Shrum, Standish & Standish say about the 20 H. P. engine bought March 1st of you: They have tried it on the road to the grader and to the No. 4 Austin Stone Crusher, and they are more than pleased with it. It has been thoroughly tested on the road and to the crusher. It can pull the No. 4 crusher with 50 lbs. of steam to its fun capacity. It can't be beat for a 20 H. P. engine. The Avery is all right.

A. B. MORRIS, Engineer.

USERS SAY THAT

#### The Avery Engines are Durable

ROSTHERN, SASE., CANADA, Dec. S, 1905.

MESSES. HAUG BROS. & NELLERMOE Co., Winnipeg, Man.

Dear Sirs:—I am well satisfied with my Avery Threshing Machine, consisting of 30 H. P. return flue boiler engine, 36x60 separator with all attachments. Everything runs like a clock. After four years use of the Avery I think she is the best machine for hard knocks on the morket. I can beat all comers on the road or in the field. Have threshed foo bushels of oats in 60 minutes. My machine is as good, as far as I know, as when she left the factory.

Faithfully yours,

AVERY MANUFACTURING Co., Des Moines, lowa.

Dear Sir:—We have a Yellow Fellow outfit, a 32x54 separator and 14 H. P. engine.
Will go in the field with any man and do as fast and do as good a job cleaning and separating grain as any machine made.

Our engine has been run 10 years, and never had a leaky flue, and has had extra hard usuge; but it just plays with the separator in wet grain and on the road.

We have run our separator three years, and haven't stopped more than one hour on its account in the three years.

Wishing success and prosperity to the Avery Manufacturing Company, and those running Avery machines, I remain,

Very respectfully yours,

G. W. McDANNEL

G. W. McDANNEL Very respectfully yours,

\* \* \* \* \* \* REARDON, WASH., Oct. 30, 1905.

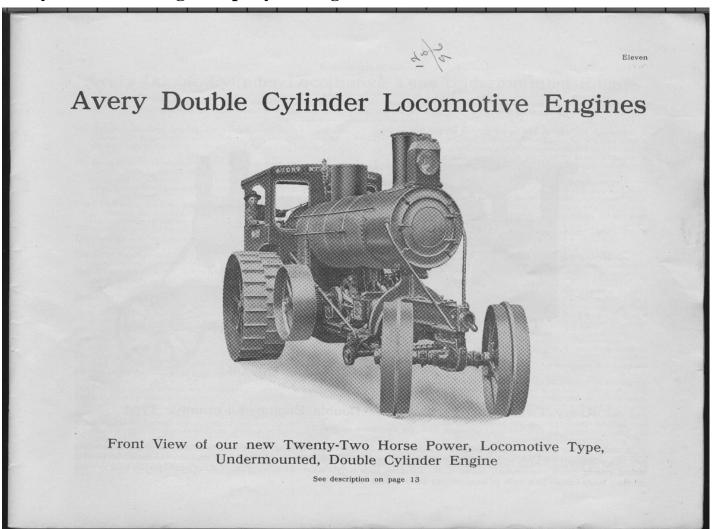
AVERY MANUFACTURING Co., Peoria, III.

Dear Sirs:—I run my rig 52½ days, and I averaged 1239 sacks a day, and they went 130 pounds to the sack. There are bigger rigs in the country than my rig, but they did not come within 200 sacks of me. The Yellow Fellow is in the lead. Some of the threshing companies said, "Why don't you get a new rig and throw that old rig away?" I told them I would run it this fall and see what I could do. Now I ask them if they like the old rattletrap, and they say, "Our rig didn't have the show you had." I threshed right alongside of different makes, but I got in the lead and I stayed there.

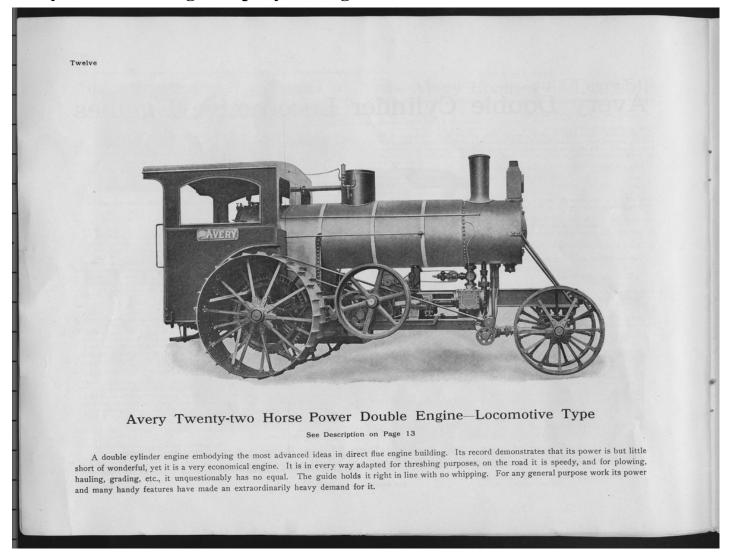
Yours truly, RUSSELL B. SHEPHERD.













#### **Avery Manufacturing Company catalog**

Thirteen

#### Description of the

#### Avery Double Cylinder Locomotive Type Undermounted Engine

For the coming season we will be prepared to furnish this style Engine in either a 22 Horse Power Coal Burner or 30 Horse Power Straw Burner. An 18 Horse Power Double Engine is in course of construction.

The Cylinders, Shafting, Gearing, etc., are supported upon a frame work independent of the boiler, thus relieving it of the strain incident to the old forms of construction where the brackets are fastened to the

boiler.

The Boiler is of the locomotive type, ½-inch flue sheet, and is extra well stayed. It is unusually well equipped with hand-hole plates and made easy to clean out. The 18 horse-power boiler has 54 2-inch flues, the 22 horse-power, 62-inch flues, and the 30 horse-power, 43 2½-inch flues.

43 2/2-incn flues.

Steam Pipe leaves the dome, runs back to the throttle, down into top part of the boiler and forward through the top of the boiler into the smoke box and down to the engines. Thus the steam is superheated and

box and down to the engines. Thus the steam is superheated and condensation is prevented.

The Bearings and the engine parts do not absorb heat from the boiler, since they are on separate frame work.

The Boiler Supply is effected by two injectors, or independent pump with heater and one injector if desired.

Rear Wheels are 26 inches face and 65 inches high on 18 and 22 horse-power engines, and 26 inches face and 75 inches high on 30 horse-power engine.

power engine.

Special 10-inch Rim Extension for rear ground wheels, making total width of 36 inches, can be supplied.

Front Wheels are 12 inches face and 46 inches high on 18 and 22 horse-power engines and 12 inches face and 56 inches high on 30 horse-power engines.

power engines.

The Wheel Base is long, improving its condition for rough roads and hill-climbing work.

The Gearing is very strong, Pinions are steel and Bull Gears have 6-inch

Friction on the Bearings is reduced on account of the gearing being in direct line.

The Bearings subject to wear are adjustable.

Crank Shaft is one piece of steel, very heavy (3½-inch diameter), and has

Crank Shaft is one piece of steel, very heavy (3½-inch diameter), and has four heavy bearings.

Rear Axle is very strong (7 inches in diameter).

Are Mounted on Springs, which take up the jarring, making it much easier on the engine when plowing, grading or traveling on rough roads.

Are Provided with Rocker Grates.

A Five-Barrel Water Tank is suspended under the fire box out of the way.

Smoke Stack is cast, and will not burn or rust out.

These Engines are provided with a Headlight regularly.

Equipped with Eclipse Governor, especially designed for this engine.

The Valve Gear is especially and correctly designed for a double traction engine, is very durable and affords an even lead and an even cut-off at all points, whether the engines are running in one direction or the other, and may be hooked up and the point of cut-off changed according to the power required.

Each Cylinder is oiled independently by a double Kipp oil pump.

Steering is effected without the usual chain, but with a new and novel device, which eliminates the slackness and thus prevents all whipping, making the steering much easier than the old way. In plowing or when having to run close to edge of an embankment this is a great advantage. See cut on page 18.

The Engineer has a plain view from the cab for guiding.

The Short Front Axle makes steering easier.

Has a Two-Speed Gear, which is shifted from cab.

Can be equipped with Friction Clutch when preferred to Double Gear.

The Cylinder Cocks, valve chest cocks and drains to the exhaust pipe are all effected and operated by a single lever from the engineer's platform.

Front Wheels go inside of wagon track and do not raise dust to blow

platform.

Front Wheels go inside of wagon track and do not raise dust to blow on the engines. Besides the engines are so constructed that if they did it would not affect them in any way, and they will catch no more dust that the top mounted engines, and, as all the grease and oil that drops from the machinery, drops on the ground instead of on the boiler, it is the cleanest style possible.

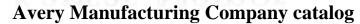
Everything About the Engine is accessible from the ground.

The Belt for the separator is much easier to put on, and, when running, clears the ground amply. (It is only necessary to see it in operation to satisfy anyone that any different impressions on this score are wrong.)

wrong.)

For Heavy Hauling, it stays on the ground, no jumping or rearing up, because the engines are carried in the right place. The heavy axle, steel Pinions and wide-faced Gearing, together with the power developed by the engines, make a combination of strength and power which is not equaled by any other traction engine. It is the most practically constructed engine for plowing, heavy hauling, road grading, etc. A number have been used for Railroad Grading and heavy Irrigation Work in the west with wonderful success. See Mr. Wiley's letter on page 20.

This Engine has come to stay. We are proceeding to develop such sizes and add such equipment as shall tend to make this the leader of its class.







Reid Bros., Deer Creek, Okla., pulling eight 14-inch plows with 22 H. P. Double Engine

AVERY MANUFACTURING Co., Peoris, III.

Gentlemen:—The 22-horse undermounted engine we purchased of you in 1905 has given us entire satisfaction. It is very powerful, easy to handle, easy adjusted and to keep running smooth. We have used this engine to do our plowing; have plowed 330 acres. We have pulled eight 14-inch bottom plows, and a harrow on behind them a part of the time, and the engine took its load with ease, with the reverse hooked up in the last notch

to center.

We do not think we could have purchased any other make of engine that would have done the work as satisfactorily as this engine has for us.

Respectfully yours.

REID BROS.

Frank McDeranott,

Care Avery Mfg. Co., Omaha, Neb.

Dear Sir:—The rig I bought of you last fall has given me the very best satisfaction Especially am I well pleased with my 22-horse undermounted engine. Before I bought this engine I thought it might not be practical for threshing purposes, the machinery and fly wheel being low down, I thought dirt might cut the machinery out, and the belt drag on the ground, but I find after using it all fall that it is easier to keep clean than a top mounted engine, will not cut out on account of dirt, and that the belt will clear the ground with plenty of room to spare, if kept tight enough to thresh.

3 In fact, I find it well built, easy to operate, a powerful puller on gear and belt, and I believe it is far ahead of anything in its line.

Wishing you success in the future, I am,

Yours very truly,

GUS. S. THOMPSON.

\* \* \* \* \*

AVERY MANUFACTURING Co., Kansas City, Mo.

Gentlemen:—In regard to the big thresher outfit I purchased of you this season, will say, I have made no mistake in buying an Avery. I have been in the business most of my life and ought to know what I am talking about, having used several makes of machines. The 22 H. P. double cylinder engine is all right, up-to-date and equal to any emergency. I will say to intending purchasers, investigate the Avery goods before buying.

Yours very truly,

P. D. McCLUNG.

USERS SAY THAT

#### Avery Engines Easily Operated

Avery Manufacturing Co., Peoria, III.

Gentlemen:—I take the liberty to write you how I like the 22 horse-power Double Engine. In my judgment it has no equal. It is easy to handle, and easy to fire. Travels fast or slow; pulls over soft land with case. I run my thresher 36x58, with blower and feeder, with the lever hooked in the first notch from center. The belt swings 12 inches from the ground. I am satisfied it is the best plowing engine on the market, and the best for road grading. I have used several different makes.

Yours truly,

HUGH McCLUNG.

\* \* \* \* \*

Panora, Ia., Jan. 1, 1906.

AVERY MANUFACTURING Co., Des Moines, Ia.

Deur Sürz:—I have one of your complete Avery outfits as H. P., return thee, drop fire box engine and 36x60 separator. Have finished my second full's run with it and am proud to say she has been a money maker for me. I have my first repairs to buy yet.

The 25 H. P. I got I was a little uneasy about at first as I thought it was too large to get around good, but was surprised as I can get around most any place as good as with the 16 I used to have. It is a good traveler on the roads and an easy steamer, which means a fuel saver.

If there is anybody that wants to ask any questions about the engine I will cheerfully answer them.

ANDREW BELLER.

ANDREW BELLER. \* \* \* \* \*

OKLAHOMA CITY, OKLA., Aug. 6, 1905.

OKLAHOMA CITY, OKLA., Aug. 6, 1905.

Gentlemens:—I wish to say that the big double undermounted engine we bought of you this season is one of the most perfect pieces of machinery I ever saw. When I want to get to my engine, I don't have to climb over a red hot boiler to get to It, as I can reach everything from the ground. The boiler is an easy steamer, and will hold steam all night better than any engine I ever saw, and will further say it is one of the eastest engines to get on the bell I ever saw, and the belt has never left the fly-wheel this season. It always stays right in its place.

In conclusion, I will say to any prospective buyer that he can do no better than to buy an Avery double undermounted engine.

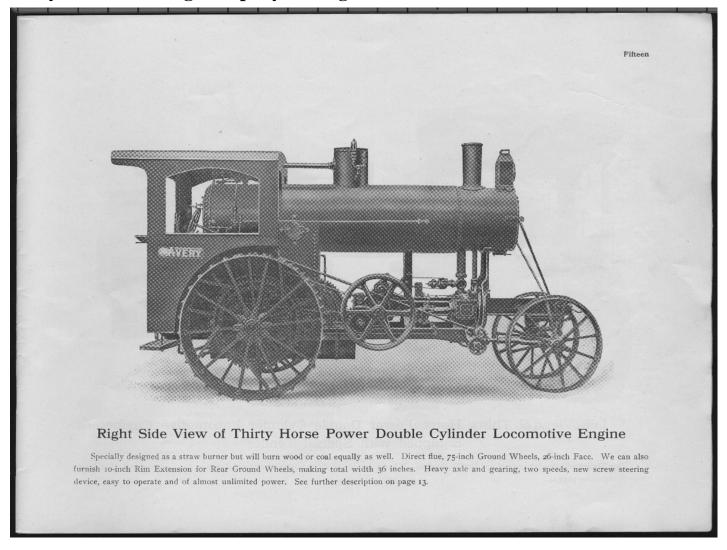
Yours very respectfully,

J. G. & G. U. CLINE.

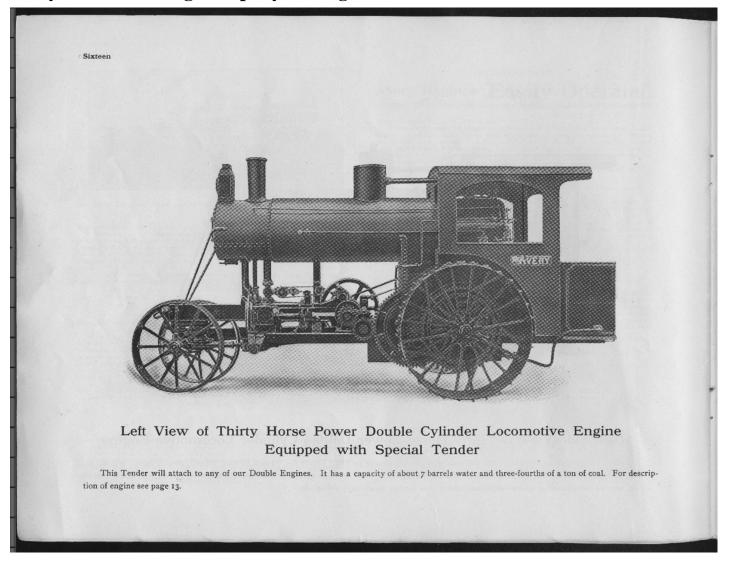


P. D. McClung, O'Keene, Okla., with his Avery rig

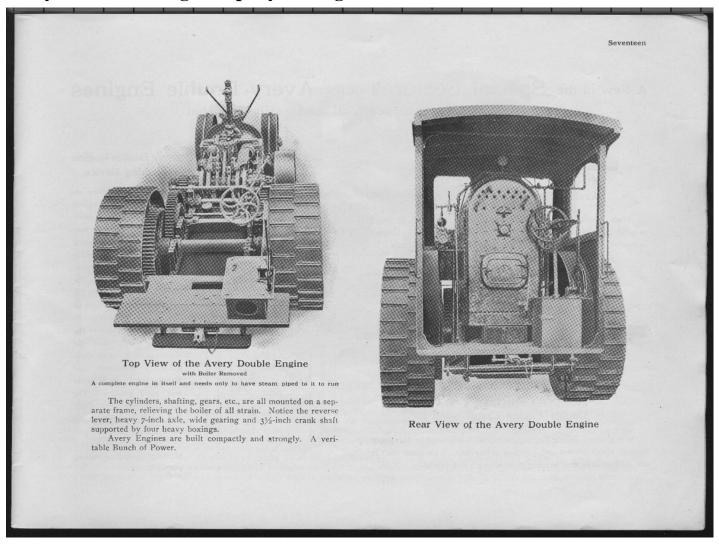














### **Avery Manufacturing Company catalog**

Eighteer

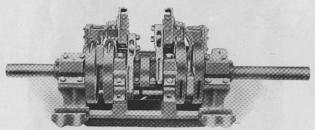
### A Few of the Special Features of the Avery Double Engines

which make them powerful and easily operated



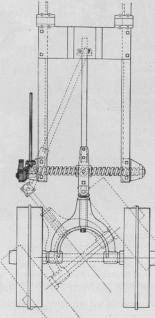
#### Avery Double Engine Rear Axle

Made especially strong (4½-inch steel shaft, reinforced by heavy cast iron mold, making axle 7 inches in diameter in center). The Gearing cannot be sprung or thrown out of line by any springing of this axle.



#### Double Engine Crank Shaft

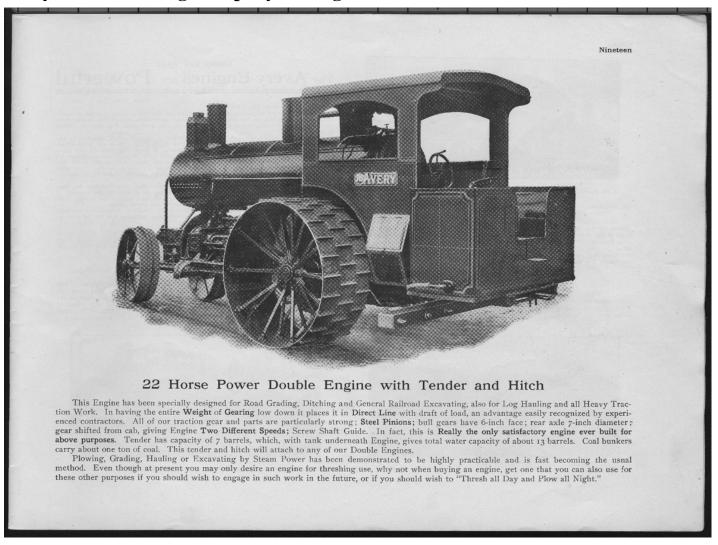
Our 3½-inch Double Engine Crank Shaft is supported by four heavy boxings, which prevent any springing of the shaft. This crank shaft is one solid piece of steel insuring great strength and durability.



#### Avery Double Engine Steering Device

The Steering Device on the Avery Double Engines is very effective and easily operated, yet of simple construction and with no parts to get out of order. Turning the steering wheel revolves the gearing and turns the screw shaft, which shifts the guide either to the right or the left. The guide responds at once to every turn of the steering wheel, thus the slackness of the usual chain guide is eliminated and steering made much easier and more positive. The Engine moves in a direct line, when the guide is set at a certain point, a particularly valuable feature for plowing, grading or hauling purposes.







### **Avery Manufacturing Company catalog**



Mr. VOORHEES,

Care Avery Mfg. Co., Kansas City, Mo.

Dear Sir.—I am sending you photograph of the large engine pulling a house. I cannot say too much for the big fellow and what she can do as a puller. She has no equal in her class, she stands alone. I have pulled a ½ steel cable in two with the engine on a straight pull with one-fourth of the throttle open on eighty pounds of stam. It is not a question of how much can the double Avery pull, but it is a question, show me something that moves on wheels that I cannot pull. As to handling, a fifteen-year-old boy can hardle this engine, the engine is so simple to understand.

Respectfully,

J. M. SHORT.

\* \* \* \* \*

Newton, Kans., Oct. 17, 1905.

AVERY MANUFACTURING Co., Kunsas City, Mo.

Deor Sirs:—I have been using one of your locomotive traction engines pulling a wagon loader grader on railroad work, and have been getting along splendidly.

Yours very truly.

A. MOORE.



USERS SAY THAT

#### The Avery Engines are Powerful

Avery Manupacturing Co., Peoria, Ill.

Gentlemen:—Our traction engine purchased of you last fall is doing satisfactory work, and has not been laid up for repairs for anything except some new rivets in the drive wheel, which your changes that you have made in your new wheel will entirely obvite in the future.

During lisis winter, we have continually broken frost with plows attached to the engine, that has varied in depth from 12 inches to 18 inches thick, and we are today breaking frost that it 28 inches in depth. We were wantle to break this frost by any other came to the traction which plows steadily, and have not broken any evertal plows with the were built strong enough to hold the traction, of which we only have one. This plow has stood the breaking of the frost for the last six weeks and we expect to do this the balance of the winter.

As a maiter of information to you, would say that no other Canal Company has been able to continue work in the northern part of Wyoming on account of the severity of the weather, during the past winter, except ourselves. We have worked full handed after breaking the frost and have had no difficulty in keeping the forces going.

The radicouls that were extending their lines to the Shoshone Reservation are both of the continue work in which they might have obviated had they had one of your 22 or 30 horse-lower tractions.

ABOUT THE TIME OF WRITING THIS LETTER MR. WILEY ALSO PUR-

ABOUT THE TIME OF WRITING THIS LETTER MR. WILEY ALSO PUR-CHASED AN AVERY STEAM PLOW TO USE WITH HIS DOUBLE EIGHE AND CONSIDERS IT TO BE THE FINEST OUTFIT IN THE STATE OF WYOMING OR ELSEWHERE.

BANCROFT, IOWA, Oct. 19, 1905.

AVERY MANUFACTURING Co., Des Moines, Iowa.

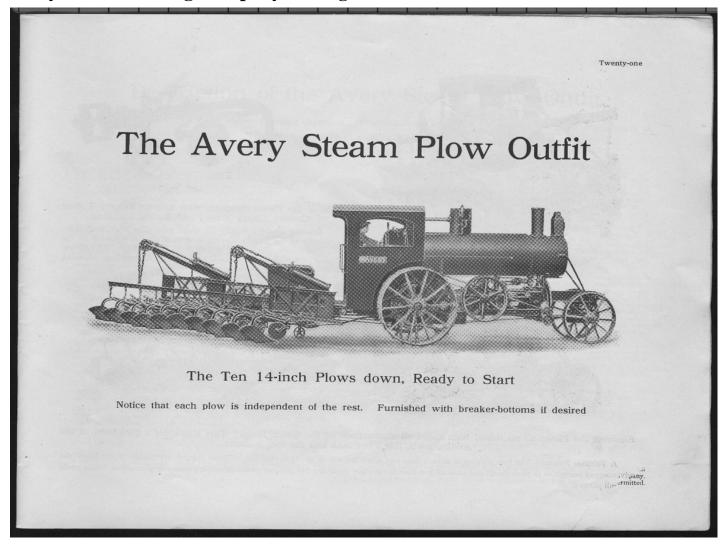
Gentlemen:—We operate a 20 H. P. Avery engine and a 36x60 Avery separator. The engine is making its seventh fall run, and it is as good, and I believe a little better yet, than a new one of some other make. It is a very easy steamer and a good puller in the belt and on the road. We pulled through a place where a man got stuck with a load of barley of 35 but, and we pulled alongside of it and never stopped, with engine and separator coupled together.

Respectfully, F. A. FANGMAN & BLOCKER.

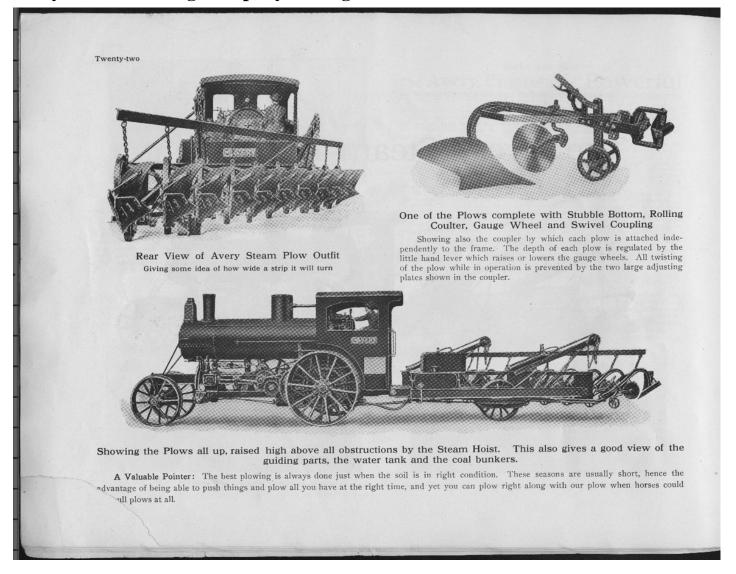


A. Moore, Newton, Kansas, "getting along splendidly," using a 22 H. P. Double Cylinder Traction Engine in railroad excavatio











### **Avery Manufacturing Company catalog**

Twenty-three

### Description of the Avery Steam Plow Outfit

The Outfit that has solved the Steam Plowing Question. Practical tests have proven that there is none other equal to the "Avery." This Outfit consists of a 22 or 30 H. P. Double Cylinder Engine

with a Ten or Fourteen Gang Steam Plow.

The Engine shown in cut on opposite page is a 22 horse-power direct flue, double cylinder, undermounted engine with drive wheels 65 inches high and having 26-inch face. This is the second season this engine has been out and it has proved to be an engine of tremendous power and splendid traction qualities. We also build a 30 horse-power having drivers 75 inches high and 26-inch face, but can furnish both our 22 horse-power and 30 horse-power with 10-inch rim extensions, making total width 36 inches. This 30 horse-power engine is a fine STRAW BURNER. See description on page 17.

The Steam Plow shown in cut on page 22 has ten 14-inch mold board plows. We build this Steam Plow with either ten or fourteen 14-inch mold board plows, equipped with either stubble or breaker bottoms. If for any reason it is desired to use fewer than the regular number of plows, a single plow from the right side and as many as two from the eft side may be removed.

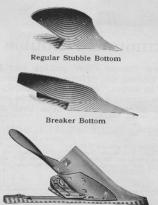
The Frame Work is built entirely of steel, bolted together, making a splendid construction. It is connected directly with the main frame of the engine in the most substantial manner. Compare this all steel frame with the cheap wooden frames of other makes, which are easily broken or twisted out of shape.

The Tender—The engine is provided with a water tank, which is under the engine, and the plow frame also has an extra tank of 6 barrels capacity, which, with tank underneath engine, gives a total water capacity of about 11 barrels. The coal bunker on the plow frame carries one ton or more of coal.

The Carrying Wheel—The plow is mounted on a single carrying wheel, which works in a turn-table. The circle around the wheel is on ball bearings, so it turns very easily.

The Guide—The carrying wheel is controlled by the movement of the Steering Device on the engine, this being accomplished by the use of rods and chain. Thus every turn of the steering wheel shifts, not only the front guide wheels of the engine, but the carrying wheel of the plow as well, so in turning corners or wherever the engine goes the plow follows directly behind. With this plow you can plow right up to the corners, or can back into the corners if desired, and thus plow up the entire field.

Raising Plows—The plows are raised by a steam lift. When ready to turn, the steam is turned into the two cylinders on the plow and all ten of the plows are lifted out of the ground simultaneously, the plow frame being sufficiently strong to carry this heavy load.



Showing Wrought Steel Frame Construction of our Plow Bottoms

The Coupler Each single plow is attached independently to the frame by an especially strong and simple coupling device which allows the plow to swing to either side as well as to be raised or lowered. Any plow will thus easily pass a stone or other object it strikes without affecting the operation of the remaining plows or straining the plow frame. All twisting of the plow, however, while in operation, is prevented by the two large adjusting plates in the coupler. See cut on opposite page.

Pin Break—Should any of the plows catch on an unyielding obstacle which it cannot pass, it simply breaks a wooden pin instead of springing a plow beam, as in some makes of steam plows.

Regulation of Plow—One fine feature of the plow is, that each plow works independently and the depth is controlled by the little hand lever which raises or lowers the gauge wheels shown just ahead of the rolling coulters.

The engine is provided with two speeds of 2½ to 3 and 4 to 4½ miles per hour. The Steam Plow with ten 14-inch mold board plows can be set to turn twelve feet, so that, moving at a moderate gait, this outfit will plow from two to three acres an hour, and do it easily. Our fourteen-gang Steam Plow will turn a strip a rod wide, or an acre for every half mile traveled. In many places where this sort of plowing is done they plow day and night, so in 24 hours the one outfit will plow 40 to 60 acres of ground, the only expense being the two men for each shift, the fuel, and in addition thereto, team and driver to haul fuel and water.

w Bottoms

The Cost of Plowing per acre varies in different localities, depending on the price of fuel, character of soil, etc., but with such an outfit as we show herewith the cost would run from 30c to \$1.00 per acre perhaps, hence any farmer having, say, a section of land could afford to use such an outfit, or it would be profitable for a number of farmers to form a club and own such a rig together.

This outfit is no experiment, but is the *real thing and a practical plow*, the knowledge for its construction being obtained by actual tests in the field and is not guess work or theory.

Our ENGINES and STEAM PLOWS are overwhelmingly ORIGINAL and all new and novel features are the exclusive rights of the Avery Manufacturing Company. Patents are pending, and no copying or infringement of these rights will be permitted.



#### **Avery Manufacturing Company catalog**

#### Twenty-four





#### 22 H. P. Undermounted Double Cylinder Engine

One of these engines attached to the new Steam Plow pulling ten 14-inch plows. These pictures were taken during a four days' exhibition near Peoria, Ill., where large crowds were delighted at the almost wonderful results shown. An acre in twenty minutes was easily covered, and it was demonstrated that a good profit could be made, as under favorable conditions the entire operating expense would be considerably less than 50 cents per acre

HIGH RIVER, ALBERTA, CAN., Nov. 17, 1905.

AVERY MANUFACTURING Co., Peoria, Ill.

Genilemen;—We have had considerable experience with steam plows and will say that your steam plow far excels any plow outfit it has been our lot to use. I think you have them all skinned to a finish on engines as well as plows. We expect to run an Avery outfit this coming season, and will be pleased to answer all inquiries by mail or person outfit this coming season, and will be pleased to answer all inquiries by mail or person.

Yours very truly,

BAKER BROS.

WHITE SULPHUR SPRINGS, MONT., Oct. 14, 1905.

Avery Manufacturing Co., Peoria, Ill.

Gentlemen:—We have the plow set up and have plowed about 30 acres of sod—ground quite dry—and we have been able to do quite good work, better we think than could have been done with any disc plow. We think in medium sod and moist ground we could do good work and lots of it, while in good stubble she ought to shins.

Yours very truly,

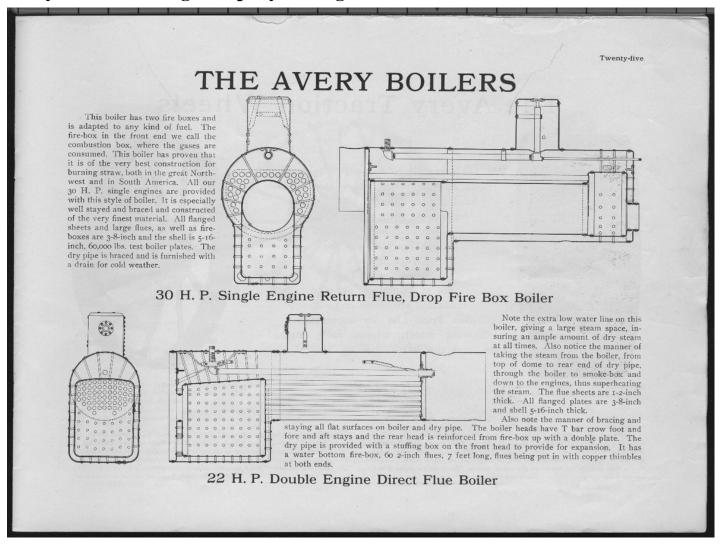
CATLIN LAND & LIVE STOCK CO.





Fields Bros., Regina, Assinibola, Canada, plowing sod ground through four inches of frost and pulling up hill on 100 lbs. steam with an Avery 30 H. P. Double Engine



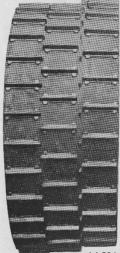




#### **Avery Manufacturing Company catalog**

Twenty-six

### The Avery Traction Wheels



Represents Face of Special 30 inch Rear Ground Whegs straight lug

We are prepared to furnish Wheels of various sizes, covering every idea of advantages for different localities and territories, with either straight or diagonal lugs. Straight lugs are the best for Western work; the diagonal lugs are of advantage on pike roads and are easier on bridges. See Price List for information showing which wheels each engine uses, and the extra cost for special sizes.



Represents 10 inch Special Rim Extension for Rear Ground Wheels on the Double Engines

BUNKER HILL, KANS., Dec. 11, 1905.

ENGLEVALE, N. D., Oct. 14, 1905.

AVERY MANUFACTURING Co-scher rigs speak for themselves in this country. The 30 H. P.

Gentlemen: —Your thr's separator I bought of your agent, Mr. Casper Olsen, has proved and it will certainly be the right outfit for the Northwest. The men that worked with me Northwest the coming season. The Avery rig is the only rig I would want.

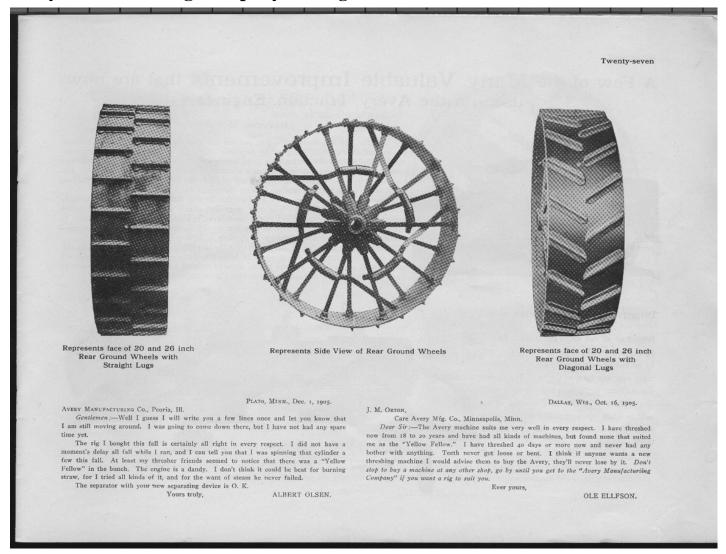
AVERY MANUFACTURING Co., Peoria, III.

Gentlemen:—We have been using and selling Avery threshing machinery for the past seven years. We must say that it is the machine which satisfies both the farmer and the thresherman, by doing the best work in the shortest possible time. The superior qualities of the machine, coupled with the courteous treatment of its patrons by the Avery Mfg. Co., establishes the rule—"Once a customer, always a customer."

Respectfully yours,

MAHONEY BROS.







### **Avery Manufacturing Company catalog**

Twenty-eight

### A Few of the Many Valuable Improvements that are now used on the Avery Traction Engines

Reverse Movement

The Reverse Movement shown at the left and used on the Avery engines, 16 horseone reverse Movement shown at the left and used on the Avery englies, in observer and smaller, was designed by us some years ago with a view of fully over-coming the serious difficulties that have heretofore been experienced in mechanisms contrived for this purpose. It is a single eccentric reverse, consisting of few parts, and the eccentric is shifted from one side of the shaft to the other on curved lines, enabling

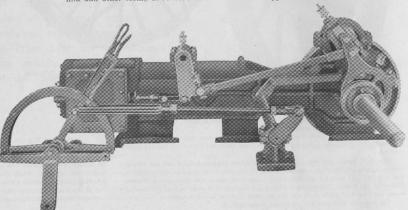
the eccentric is shifted from one side of the shaft to the other on curved lines, enabling the valve to cover both ports when it is on the center.

There is substantially no more wear to this device than there is to any ordinary eccentric when in operation. The only wear that affects any of its parts at all, is the wear produced by the movement of the hand lever in changing it from one position to the other. The eccentric is held in position on either side of the shaft by centrifugal action, and therefore all possibility of rattling or jerking is obviated.

This reverse has been on the market for the last thirteen years, and it is clearly evident from the large numbers in use, and from the statements of users, that they will run a good many years without undue wear or rattling and jerking as is common with link and other forms of reverse movement. Patent applied for.

#### Improved Springer Valve Gear

is used on all our Engines except 16 horsepower and smaller. It has been improved by us and as now constructed gives advantages over any form of the Wolf and Grime Valve Gear. Equal lead and cut-off is positively given with the lever hooked up as well as when running at full stroke. This result is obtained by the use of a curved block and slide.





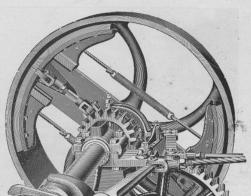
### **Avery Manufacturing Company catalog**

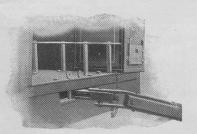


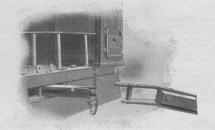
do the journals wear out.

#### Friction Clutch

While the majority of traction engines are now provided with some sort of friction clutch, we think our special design is capable of the most efficient and satisfactory results. We have provided heavy shoes with long contact surfaces, which recede from the rim of the fly-wheel with ample clearance while not in use. The friction shoes are connected by springs, making the management easy and delicately controllable at the will of the operator.







#### Our Automatic Self-Coupling Draw Bar

All you have to do is to back the engine up and guide the end of the tongue into it when you want to couple the Separator to the engine. To uncouple, pull the chain and you are ready to go. By removing the pins the bar can be swung to either side for convenience in coupling up, and then held rigidly in center of platform.