

Exhibit P



CATALOG 119 B

SECOND EDITION

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U. S. TRACTOR & MACHINERY CO.
Menasha, Wisconsin



FOREWORD

EVERY far sighted farmer in the world realizes that the money he makes from his land is solely dependent on how opportune and how economically he plants and markets his crops either directly or through dairying.

As everybody knows, Modern Farming means Tractorized Farming, so we will not dwell, monotonously, on the subject of why a tractor should be purchased.

Our effort through this catalogue is to convey to you as best we can with printer's ink, full information and facts regarding our product in concise and convenient form.

We doubt that any effort short of an actual demonstration would convey complete impressions but we hope the contents of the following pages will obtain your agreement with our claims in regard to the "Uncle Sam" 20-30 Light Farm Tractor—the Supreme offering of all Tractor-dom.

U. S. TRACTOR & MACHINERY CO.

Menasha, Wis., U. S. A.





27 OF THE MANY REASONS WHY THE "UNCLE SAM" IS THE BEST AND CHEAPEST

- 1—Finest quality of material and workmanship in every detail.
- 2—Practical design based on Fundamental Essentials.
- 3—Exceptionally strong and durable—yet light in weight.
- 4—High efficiency—more power per pound—greater economy.
- 5—Front axles and steering equipment provide automatic steering qualities—no attachments required.
- 6—Extra heavy duty medium speed 4 cylinder motor.
- 7—Motor especially designed and fully adapted for kerosene, petrol, and distillates.
- 8—All moving parts of motor enclosed.
- 9—Bennett Centrifugal air cleaner prevents dust entering motor through carburetor.
- 10—Every gear and bearing of transmission within dust-proof case.
- 11—All gears and bearings of transmission run in bath of oil.
- 12—Every gear, finest quality forged steel machined and tempered, made and registered by Nuttall of Pittsburgh.
- 13—Timken adjustable roller bearings throughout transmission.
- 14—Center of gravity low and over all height low.
- 15—Floating and compensating draw-bar, pivoted 17 inches from ground (S. A. E. Standard)
- 16—Drive wheels and front wheels exceedingly strong and durable by reason of scientific design from heavy flat steel.
- 17—Timken bearings in front wheel—entirely enclosed from dirt.
- 18—Timken bearings in steering knuckles providing easy turning and lasting qualities.
- 19—Short wheel base and special differential equipment provide short turning radius.
- 20—Steering wheel, hard maple rim, 17-inch diameter.
- 21—Belt pulley complies with standard adopted by S. A. E.
- 22—Timken adjustable roller bearings carry belt pulley.
- 23—Belt pulley properly located, making belt alignment easy—see blueprint on page 12.
- 24—Fine quality semi-elliptic spring fitted with Bronze Bushed bearings relieves governor, magneto, carburetor, and other vitals from jars and strains.
- 25—Adjustable spring seat, upholstered cushion and back.
- 26—Scientifically balanced—front will not lift.
- 27—Both drive wheels run on unplowed ground—tractor in natural position—easier for operator—is not creating another plowsole.

**Give the above points careful consideration before
selecting your tractor.**

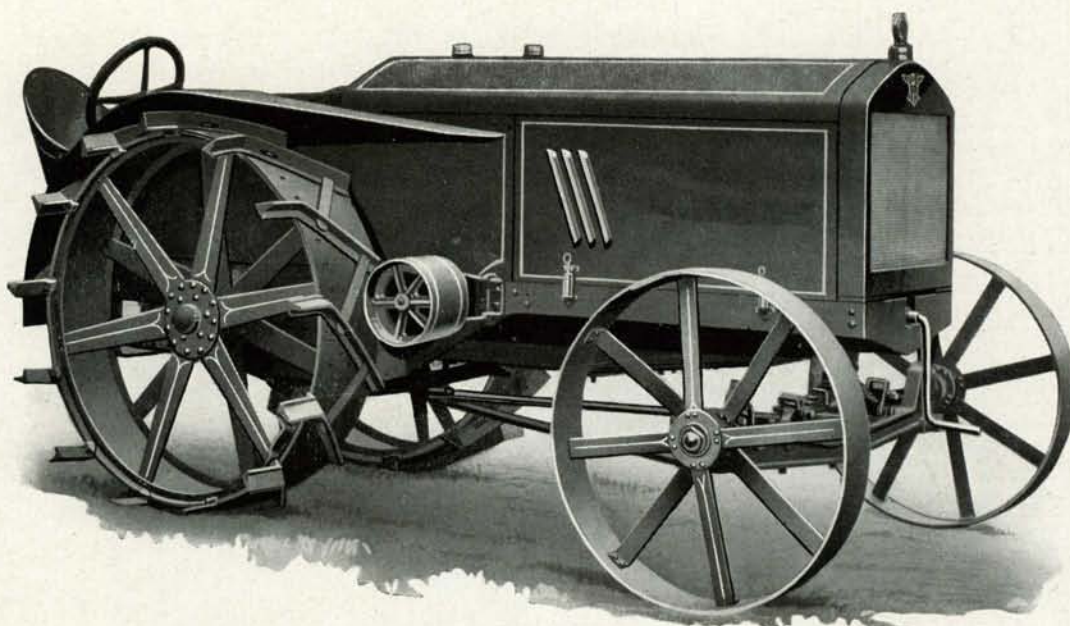
The problem of whether the farmer is going to use the tractor has now resolved itself into this:

The farmer must use the tractor.

The reason is an extremely simple one.

The farmer must produce more food with less labor.

BUILT RIGHT—STAYS RIGHT



**"UNCLE SAM" 20-30 TRACTOR
MODEL B-19**

U.S. TRACTOR & MACHINERY COMPANY

**FACTORY AND GENERAL OFFICES
Menasha, Wisconsin, U. S. A.**

The tractor is proving itself of value to the farmer in other respects than as a labor saving device—it is ridding the farm of certain of its sweatshop features.

DESIGNED FROM PRACTICAL EXPERIENCE



DETAILED SPECIFICATIONS AND RATINGS "UNCLE SAM" TRACTOR—MODEL B-19

- TYPE—Standard Four Wheel, two drive wheels rear.
LENGTH—143 inches over all.
WIDTH—Front, 74 inches over all; Rear, 54 inches over all.
WHEELBASE—85 inches.
TREAD—Rear, 42 inches, Front, 68 inches.
WIDTH OF DRIVE WHEELS—12 inches.
DIAMETER OF DRIVE WHEELS—50 inches.
WIDTH FRONT WHEELS—6 inches.
DIAMETER OF FRONT WHEELS—36 inches.
MOTOR—Type—four cylinder, overhead valve, extra heavy duty, designed especially for tractor service and particularly for kerosene fuel.
Size—4 $\frac{3}{4}$ -inch bore by 6-inch stroke.
Normal speed—900 R. P. M.
Carburetor—Bennett Producer type kerosene.
Air Cleaner—Bennett Centrifugal (no water).
Oiling—Force Feed and Splash.
Ignition—Dixie High Tension Magneto with impulse starter.
Governor—Duplex.
Water Circulation—Centrifugal pump.
TRANSMISSION—U. S.-Nuttall, Live axle gear set in dustproof housing. All gears and bearings running in bath of oil.
Gears—Made by Nuttall of Pittsburg—All gears are machine cut from forged steel blanks, heat-treated and sand-blasted.
Bearings—Timken roller bearings throughout.
Axle (Rear)—Nickel Steel, 3-inch diameter.
BELT PULLEY—Pressed steel—11-inch diameter, 7-inch face, 900 R. P. M. Belt speed 2,600 feet per minute (S. A. E. recommendation). Belt pulley is located in a convenient position ahead of the drive-wheel with ample clearance for the belt.
FRONT AXLE—I-beam steel with auto type knuckles, Timken roller-bearings in knuckle and front wheels, front axle is suspended from half elliptic spring, patented self-steering feature is embodied in the front axle construction.
RADIATOR—Perfex "Cellular" type core.
STEERING GEAR—Heavy worm and sector with 17-inch wood rim steering wheel.
FUEL TANK—Bulkhead type made of heavy steel, electric welded, 22-gallons kerosene, 4 gallons gasoline.
FRAME—4-inch steel channel.
WEIGHT—4,000 pounds.
SPEEDS—Two forward and one reverse.
Normal or plowing speed, 2 $\frac{1}{2}$ miles per hour.
High, 3 $\frac{3}{4}$ miles per hour.
Reverse, 1 $\frac{3}{4}$ miles per hour.
RATING—Belt H. P. 30.
Draw-bar pull in pounds, at 2 $\frac{1}{2}$ miles per hour, 3,000.
Pulls three 14-inch plows in heavy soil or four 14-inch plows in light soil.

FINEST MATERIAL MONEY CAN BUY



General Discussion

Our catalog having been designed for those who have accepted the principles of Tractorized farming provided a tractor can be obtained which will in a practical way do the work for which it is intended with economical results and show a good return on the money invested, we are appealing directly to the judgment of a mechanical mind and give on the opposite page a tabulation of specifications and power capacities of the "Uncle Sam" tractor, and in the following brief allotment of space will be found short discussions of some of the most important features with accurate photographic illustrations.

Type and General Features

The "Uncle Sam" 20-30 Light Farm Tractor embodies no freakish design or features, but is simply a high character of mechanical development along modern lines of tractor construction. It is a standard four wheel type having two balancing and steering wheels in front with two drive wheels in the rear. The "Uncle Sam" has a live axle drive which does away with cumbersome gears or sprockets in the drive wheels and has all gears and working parts entirely enclosed and operating in a bath of oil or grease. Constructed of the finest grades of steel along scientific engineering lines the "Uncle Sam" is an example of strength and efficiency, yet light in weight, easy and comfortable to operate, and complete to the last detail.

The Size

In determining the size of a tractor which would be suited to the highest average of requirements throughout the world, a great many conditions come under consideration. The designer of the "Uncle Sam" first lived on a farm, then sold farm machinery of all kinds in various states, after which several years was spent in manufacturing and selling farm machinery to many parts of the world, from which a good understanding of requirements is evident, additional to this experience a careful study was taken of surveys made by Federal and state government agencies, also farm and engineering publishers, from which resulted a tractor which will handle any kind of belt work ordinarily found on a farm, and has a drawbar capacity to handle all implements of advantageous size for medium to large farms, and yet does not have the objection of a weight too heavy for any soil or a fuel consumption too large for any reasonable conditions.



POWER AND MODERN FARMING GO TOGETHER



The "Backbone"

The power plant, transmission and frame work may be considered the "backbone" of a tractor, and likened unto a human being almost wholly determines the capacity and durability of the worker.

The Foundation and Support

Fig. 1 illustrates how the transmission housing is securely bolted rigidly and directly to the heavy duty power plant, and while these master units are shown with a 4-inch channel frame, they will withstand any strain within themselves and maintain absolute alignment without the frame, which is merely to support in a neat and practical way the radiator, drawbar, and other fixtures.

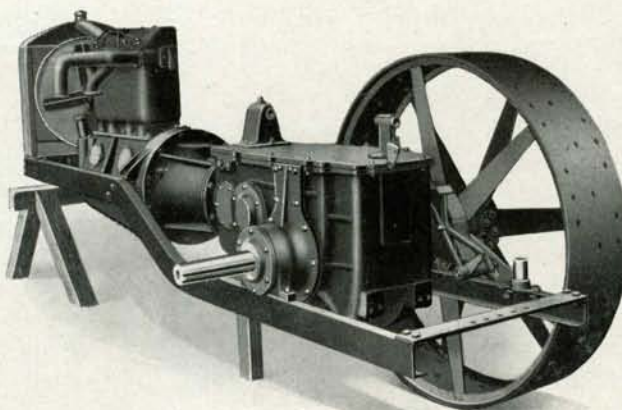


Fig. 1

The Wheels

All of this supported by equal strength and refinement with a modern automotive type of front axle suspended by a semi-elliptic spring as shown in Fig. 2, and very strong but light wheels which first have provided a steel hub on which is fabricated the spokes and rims from plate steel, hot riveted with high carbon steel rivets. Due to the scientific design and the exceptional character of the materials, great strength and stability is obtained with a minimum of weight.

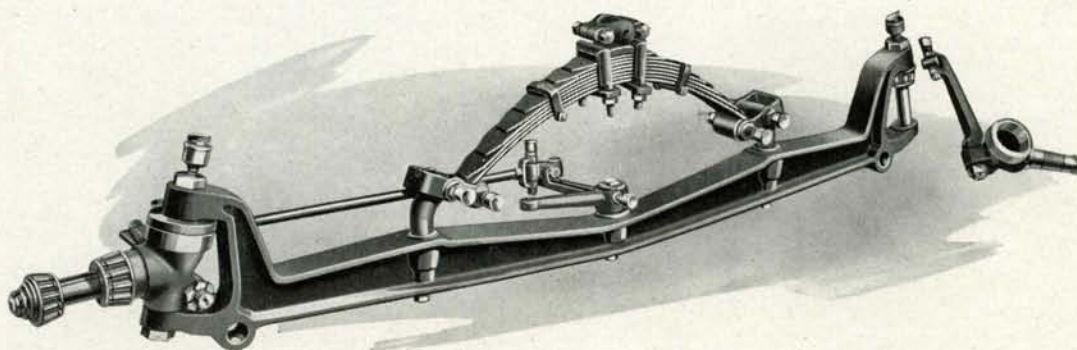


Fig. 2

LIGHT WEIGHT—HIGH EFFICIENCY



The Super Jeweled Timkenized Tractor

Reference to Fig. 3, which gives a sectional view of our transmission, also to Fig. 2 showing the front axle, shows clearly how every heavy duty bearing in the transmission and axles has a large Timken adjustable Roller Bearing and makes plain the reason why the "Uncle Sam" has been dubbed the "Super-Jeweled Timkenized Tractor."

Enormous loads and terrific thrusts at frictional bearing points are ably cared for by eighteen Timken Bearings, the excellent reputation of which are too well known the world over to require further comment here, except to state that the ample size of each bearing installed to withstand not only heavy loads but extreme strains was determined by Timken engineers. Also let us call attention to the fact that these bearings can be adjusted to the thousandth part of an inch — and this by the user himself — for the unavoidable wear of steel against steel.

Gears and Transmission Assembly

A careful study again of Figs. 1 and 3 should

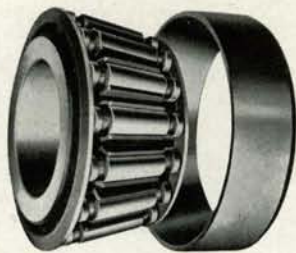


Fig. 4

give the reader a good idea of the very excellent gear set and transmission assembly as used in the Uncle Sam Tractor.

It will be seen that not only are all of the gears and bearings in the transmission enclosed free from dirt and exposure and operating in a bath of oil, but due

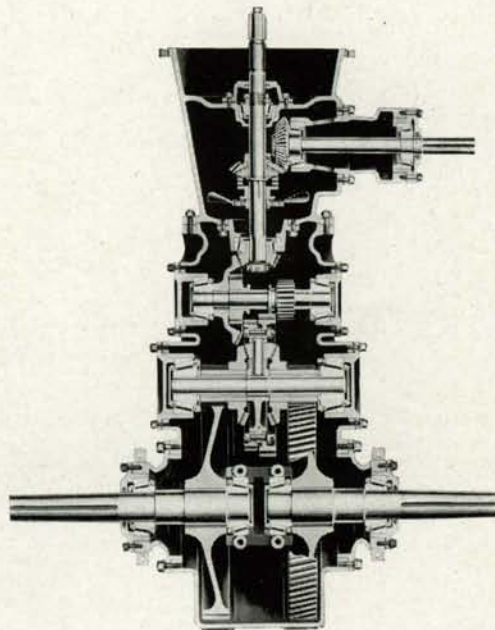
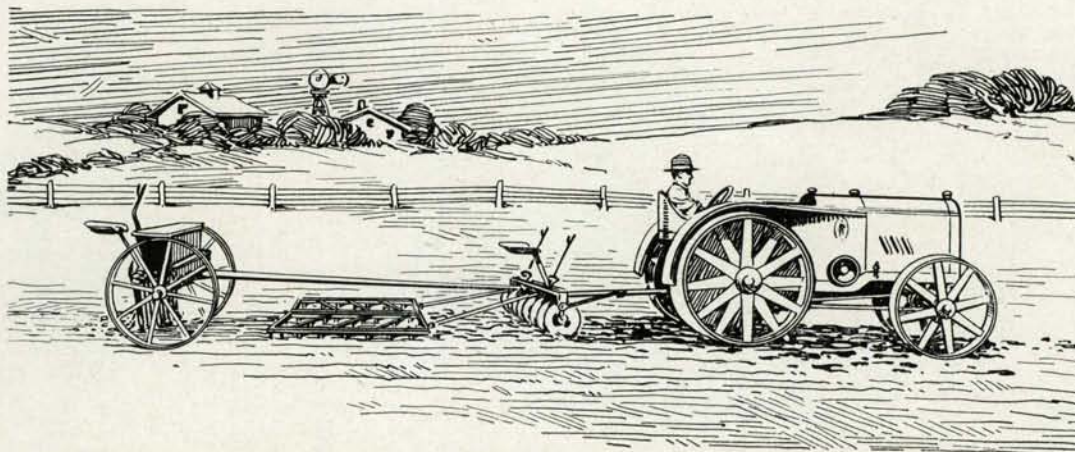


Fig. 3

to the fact that all these parts are most accurately assembled within a one-piece housing there is absolutely no chance for these vital parts to get out of alignment under the stress of any strains or abuse and yet by the easy removal of the cover from this transmission housing convenient access is obtained to the entire transmission.

Please further notice how the unit assembly principle has been followed, together with the means for easily removing any gear or bearing from this transmission. Special attention is directed to the fact that all of these gears are large and are machine cut from high quality steel forgings, heat treated and sand blasted and furthermore every gear is registered, which registry number gives a complete history of its construction. The fact that these gears and the transmission assembly are made up to our specifications by the R. D. Nuttall Co., Division of the Westinghouse Electric & Manufacturing Co., of Pittsburgh, who have made gears for street cars and heavy duty power plants for more than fifty years, is ample proof of the dependability of this feature of the Uncle Sam Tractor.



"HOW MUCH"—VALUE, NOT PRICE



The Power Plant

When we recommend kerosene and similar low gravity fuels we do so with a full realization of requirements. We have not contented ourselves to use an ordinary gasoline motor and attempted to obtain results by a simple application of some so-called kerosene carburetor or manifold but we have had one of the oldest large motor manufacturers build a heavy duty tractor motor especially for kerosene according to specifications applied by an internationally recognized talent who has specialized in this art, and the results we are obtaining from these motors are beyond our fondest expectations.

This specially designed motor has four vertical cylinders, $4\frac{3}{4}$ -inch bore by 6-inch stroke, cast en bloc as shown in Fig. 5, in which illustration is also clearly shown the neat and careful installation of the Bennett Multiple Jet Producer Type Carburetor, as further and individually illustrated in Fig. 8. This being unquestionably the highest development of a carburetor to handle not only kerosene but alcohol and distillates as well.

Fig. 5 also clearly illustrates the installation of the Simplex Governor, which is the highest priced and acknowledged to be the best on the market. This governor will regulate the speed of the engine under all conditions, whether pulling a light load or heavy load, plowing, threshing, or doing other stationary work. It will not permit the engine to race, overheat or vibrate.

Also the reader may observe our patented two-way exhaust valve which will throw the exhaust through the producer compartment of the carburetor or otherwise throw the exhaust directly out through the muffler without sharp angles or back pressure. Another feature of great importance which we have not overlooked is a proper provision to clear the air from all dust or dirt before it enters the motor through the carburetor. This being the only possibility for dirt to come in contact with any vital part of the motor. For this we employ the Bennett Centrifugal Dry Air Cleaner, as shown in Fig. 6, which is extremely efficient in performing its duty and is remarkable in that it has no moving parts to wear out, no cloths to clean and no water to get muddy and clog. Simply remove standard Mason type fruit jar from bottom and empty dirt.

Fig. 6 gives another view of this excellent power plant and clearly shows the installation of the large centrifugal water pump, to force the circulation of cooling water and also how the Uncle Sam power plant is equipped with a Dixie Model 46 Twentieth Century High Tension Magneto, which durably supplies dependable ignition, and we would call especial attention to the addition of Sumter Starter Coupling, making it easy to start the motor and avoiding possibility of kick-back.

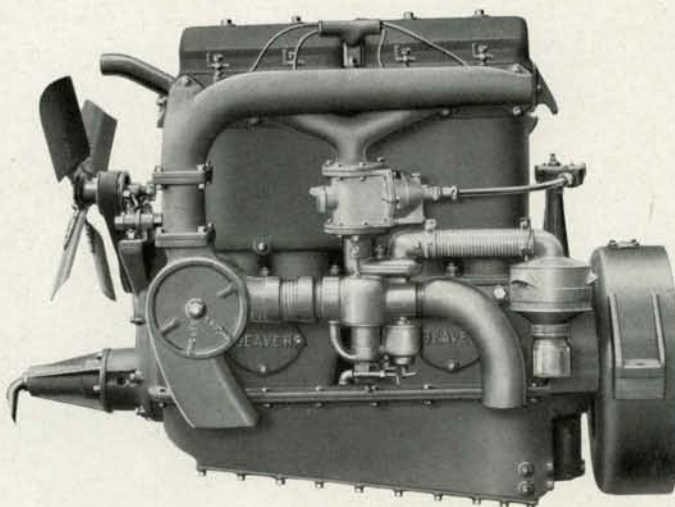


Fig. 5



Fig. 7

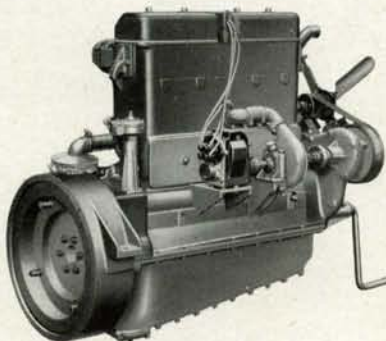


Fig. 6



Fig. 8

MORE POWER—LESS FUEL



Fig. 5 also shows the bell housing of the motor around the fly wheel already to be bolted direct to the housing of the transmission and the reader may also note how the fly wheel is made ready to receive the Twin Disc Clutch which is illustrated in Fig. 10, which is an extremely simple heavy duty clutch made especially for tractor service. It can easily start the tractor with a full load without overheating or damage. It has a simple adjustment for taking up the wear of the friction disc which is quickly made without the use of tools. It is to be regretted that a great many excellent features of refinement of the Uncle Sam Tractor cannot be illustrated in this catalogue for the want of space, and so we are compelled to give simply one further example of how every part and detail has been provided with the best.

In Fig. 11 is shown the Sylphon Regulator, which is a part of the cooling system in connection with the power plant of the Uncle Sam Tractor. The operation of the Sylphon Regulator is automatic and causes the motor to warm up quickly when starting even on the coldest days because circulation through the radiator is retarded until the temperature of the engine rises to the point of maximum all around efficiency and the circulation of cold water from radiator jacket to motor jacket when you stop your motor is automatically shut off, thus keeping the engine warm for a long time. This device serves to reduce the consumption of fuel, prevents carbon deposits in the motor, etc.

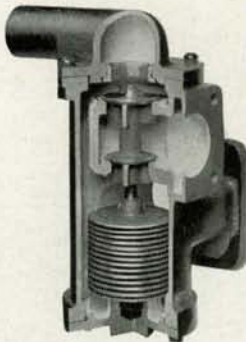


Fig. 11

The Uncle Sam is completely equipped, ready to run and to do all the work which it is represented to accomplish and no extras are required. The regular equipment includes suitable wheel lugs and all such items as moto-meter as shown in illustrations which is for the purpose of indicating the exact condition of the motor at all times.

While we do not feel that we have reached the day for tractors to be standard equipped with self-starters and electric lights we are prepared to furnish either electric or air starters but recommend the Christenson Air Starter. We are also prepared to furnish tractors equipped with electric lights including suitable storage battery. Either of these extras may be installed either before or after shipment or later.

The reader will please bear in mind that space has permitted only brief reference to a few of the quality features and very much more might probably be said in behalf of this truly high quality Uncle Sam Tractor and may we hope that sufficient has been said and illustrated to enable the reader to believe that we can make good on our claims in behalf of the Uncle Sam 20-30 Light Farm Tractor—The Supreme Offering of all Tractordom.

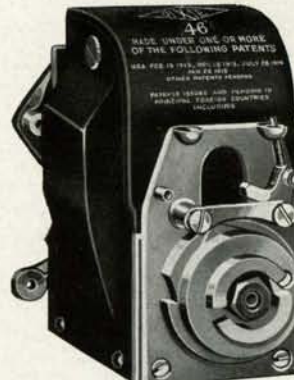


Fig. 9

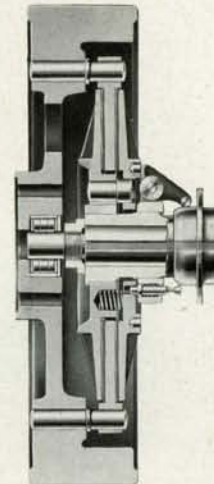
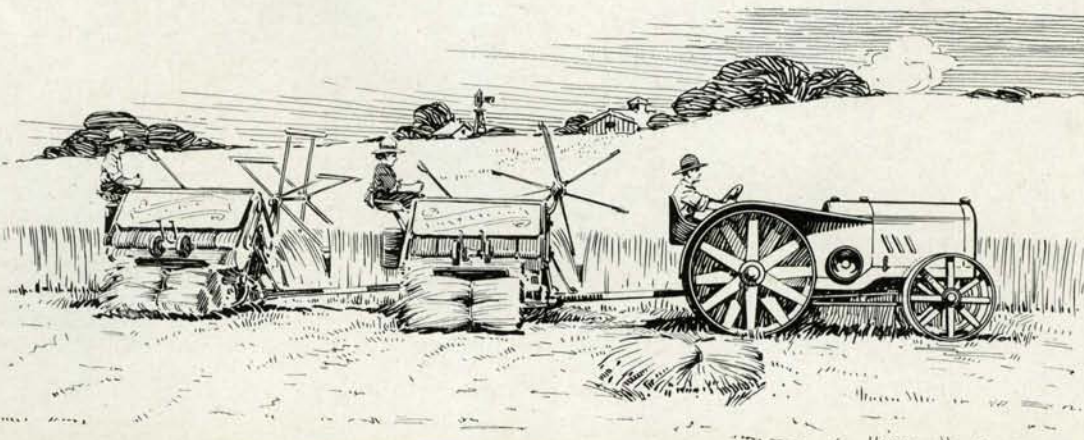
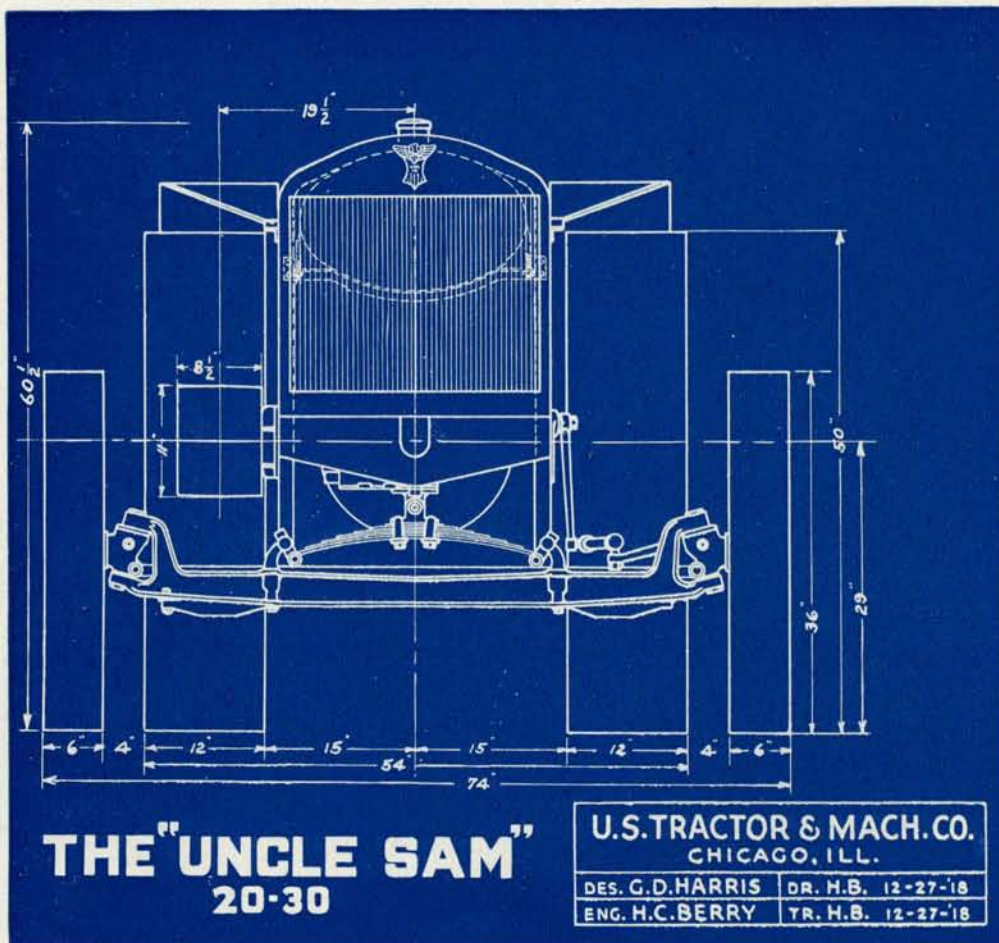


Fig. 10



CROPS CAN'T WAIT FOR REPAIRS



The above blueprint clearly illustrates the relative position of the front and rear wheels of the "UNCLE SAM," also the height and overall dimension.

When plowing, the drive wheels and main mechanism set squarely on the unplowed ground while the ball and socket suspension of front axle allows one of the front wheels to run in furrow, which becomes the guide wheel in connection with the automatic steering features which are incorporated in the "UNCLE SAM." In the illustration below, Fig. 1 shows the position of the "UNCLE SAM," while Fig. 2 illustrates a wide tread tractor where one of the drive wheels is run in the furrow causing both machine and operator to assume unnatural positions.



Fig. 1

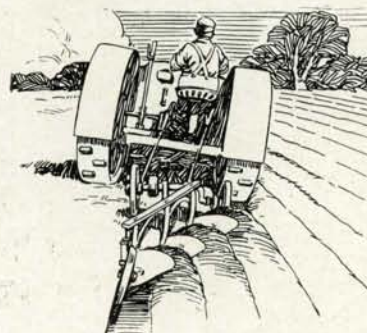


Fig. 2

YOUR FARM DESERVES THE BEST

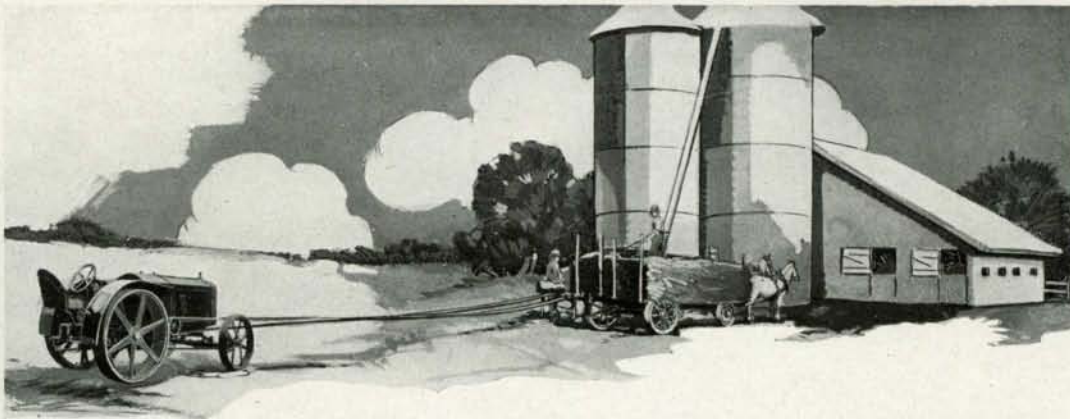


Telegraph and Cable Codes

U. S. Tractor & Machinery Co.....	Ustraco, Menasha, Wis.
"UNCLE SAM" 20-30 Farm Tractor complete with	
wheel lugs.....	Perfection
Ship at once by Freight.....	Book
Rush by Express.....	Bake
Prepare for shipment and await shipping instructions.	Beam
Can you ship at once?.....	Cabin
Can you ship in one week?.....	Camp
Can you ship in 30 days?.....	Candy
How many can you ship in 30 days?.....	Dance
How many can you ship per month?.....	Defer
What is your lowest price F. O. B. Factory?.....	Eager
What is your lowest price F. O. B. New York?.....	Earth
What is your lowest price F. O. B. Pacific Ports?.....	Ebony
Duplicate our order dated or numbered.....	Elate
Add to our order dated or numbered.....	Elude
Send what you can of our order at once.....	Endow
Deposit will follow by mail.....	Faith
Shipment not here, send tracer.....	Gallop
Include with our order suitable plow for each tractor..	Handy
Rush supply advertising cuts.....	Image
Rush supply printed matter.....	Issue
No letter received, rush duplicate.....	Jelly
Bill Ladings not received covering our order No.....	Kitty
When will you ship our order of.....	Lame

Also Bently, A. B. C., Liebers and Western Union

NOTE—The above Codes are subject to Governmental Cable Regulations.



BROKEN PARTS—WASTED OPPORTUNITIES



Freight Rates, Weights and Dimensions of Boxes

Freight rates on shipments of single machines and carload lots from Menasha to various points in the United States and Canada:

MENASHA TO	Less Carload Per Hundred Pounds	Full Carload Per Hundred Pounds	MENASHA TO	Less Carload Per Hundred Pounds	Full Carload Per Hundred Pounds
Albany, N. Y.	\$1.43	\$0.53½	Louisville, Ky.	\$1.09	\$0.37
Atlanta, Ga.	2.01½	.84	Lincoln, Neb.	1.06½	.44
Austin, Tex.	2.34	1.19½	Little Rock, Ark.	1.75	.62
Baltimore, Md.	1.44½	.52½	Memphis, Tenn.	.97½	.55
Bismarck, N. D.	2.00	.77½	Minneapolis, Minn.	.75	.27½
Boston, Mass.	1.54½	.58½	Montreal, Que.	1.47½	.55½
Buffalo, N. Y.	1.12½	.37½	New Orleans, La.	1.09	.61½
Cheyenne, Wyo.	2.25	1.12½	New York, N. Y.	1.47½	.55½
Cincinnati, O.	1.06½	.26½	Omaha, Neb.	1.00	.40
Columbus, O.	1.09	.36	Ottawa, Ont.	1.47½	.55½
Dallas, Tex.	2.34	1.19½	Philadelphia, Pa.	1.45½	.53½
Des Moines, Ia.	.75	.31½	Phoenix, Ariz.	3.62½	1.90
Detroit, Mich.	1.05½	.35	Pittsburgh, Pa.	1.20	.40
Eau Claire, Wis.	.75	.22½	Portland, Ore.	4.25	1.94
Edmonton, Alb.	3.51½	1.37½	Quebec, Can.	1.65	.63
Evansville, Ind.	1.06½	.26½	Quincy, Ill.	.75	.27½
Frankfort, Ky.	1.38	.46½	Regina, Sask.	2.67½	1.02½
Fredricton, N. B.	1.85	.74½	Richmond, Va.	1.44½	.52½
Grand Rapids, Mich.	1.01½	.33½	San Diego, Cal.	4.25	2.00
Guthrie, Okla.	1.90	.84	San Francisco, Cal.	4.25	2.00
Helena, Mont.	3.31½	1.60	Seattle, Wash.	4.25	1.94
Indianapolis, Ind.	.99	.26½	St. Louis, Mo.	.79	.32½
Jackson, Miss.	1.29	.77½	Vancouver, B. C.	4.31½	2.00½
Jefferson City, Mo.	1.00	.40	Windsor, Ont.	1.10	.37
Kansas City, Mo.	1.00	.40	Winnipeg, Man.	1.81½	.67½

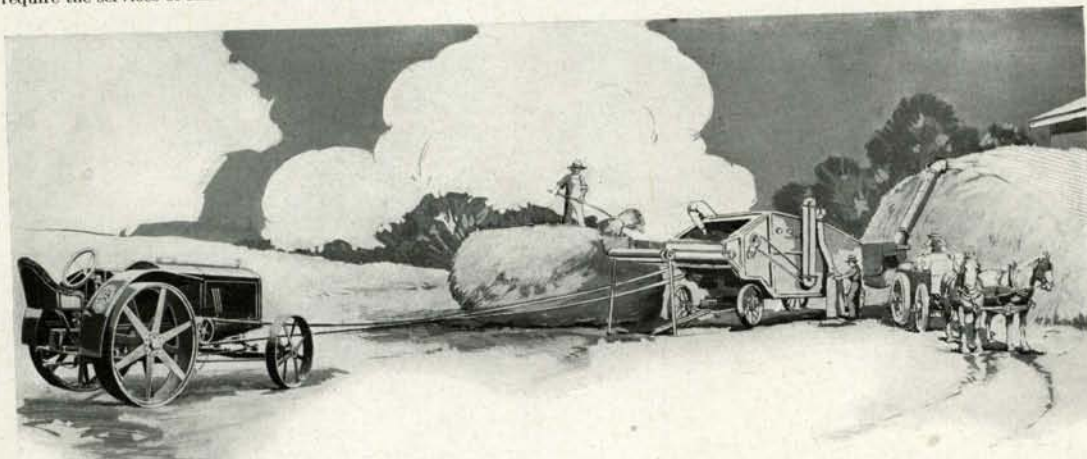
The above rates were procured from reliable sources at the time of going to press. They are given for the convenience of purchasers in estimating transportation costs on our tractors, but are not guaranteed.

WEIGHTS AND DIMENSIONS

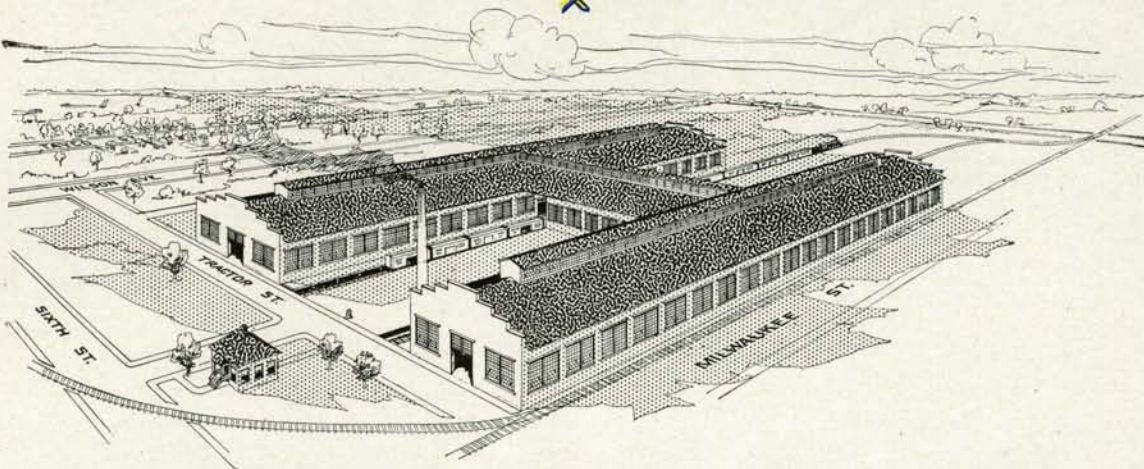
Note:—For the benefit of our export trade we have standardized on the following method of boxing:

	Style 1-B (2 Cases)		
	Box No. 1	Box No. 2	Total
Gross weight, est.	5400	1100	6500
Tare weight, est.	1500	350	1850
Net weight, est.	3900	750	4650
Length	10' 11"	4' 4½"	
Width	4' 5½"	4' 4½"	
Height	4' 9"	2' 8½"	
Cubic ft.	230.57	51.03	281.60 cu. ft.

When desired Uncle Sam Tractors can be knocked down to a much greater extent reducing total cubic footage to approximately 210 feet, packed in three cases. We, however, recommend the above as it permits of quick and easy assembly and does not require the services of skilled mechanics.



COMPLETE—NO EXTRAS TO BUY

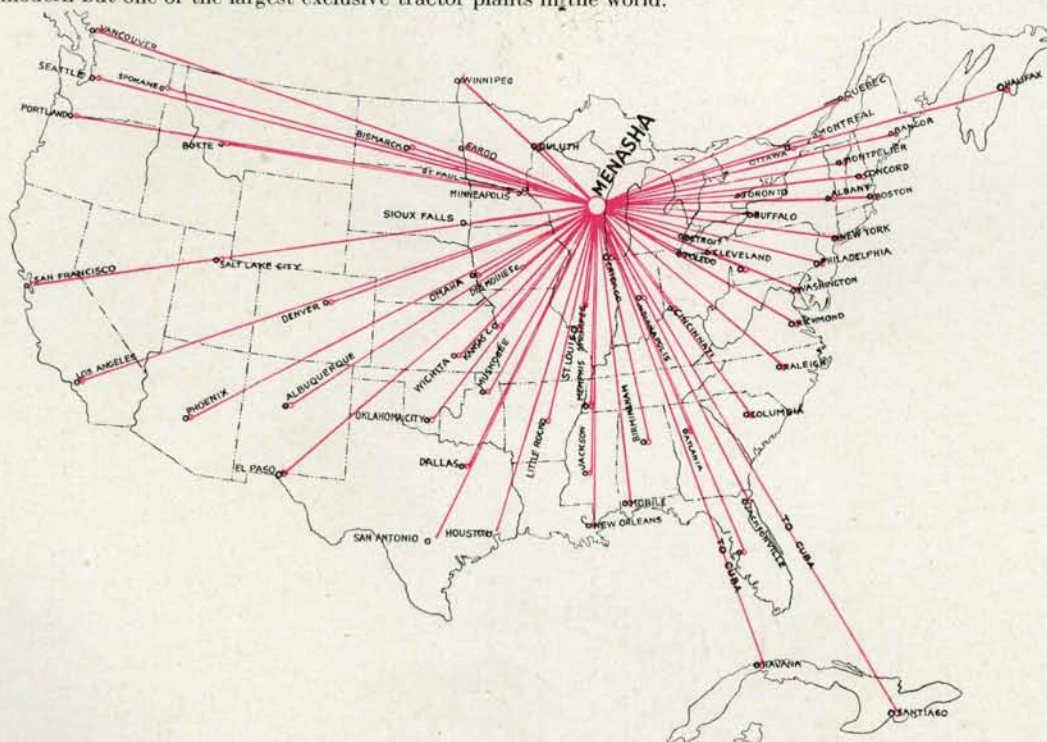


The Home of the "UNCLE SAM"

Be concerned not only in the selection of a tractor of the proper size and qualities at the right price, but also assure yourself that it has been "Brought up" under ideal conditions and goes out to you from a "Substantial" home.

"Uncle Sam" Tractors are manufactured under ideal conditions.

We own 10 acres of excellent property facing 750 feet on Sixth St., between Tayco St. and C. M. & St. P. Ry., in the city of Menasha, and have erected and paid for without bonds or indebtedness of any kind the first unit of our new factory and administration building. When completed we will have not only the most modern but one of the largest exclusive tractor plants in the world.



Menasha enjoys ideal labor and manufacturing conditions, and is served by the C. M. & St. P., C. & N. W., and Soo Line railways. Also the Wisconsin Northern will be extended from Appleton to Menasha during the present year, and the river navigation and interurban electric lines afford excellent shipping conveniences and competitive conditions.

POWER AND MODERN FARMING GO TOGETHER



Printed by
DUGGAN PRINTING CO.
Oshkosh, Wis.

Designed and Compiled by
G. D. HARRIS
Menasha, Wis.

Engravings by
HAWTIN ENGRAVING CO.
Chicago, Ill.