

Catalogue No. 7.

1902.

General Illustrated Catalogue



Send list of material wanted, we may be able to give special prices.

A. L. DYKE,

MANUFACTURER AND JOBBER

AUTOMOBILE PARTS and SUPPLIES

Office and Salesroom,

1402 Pine Street, = St. Louis, U. S. A.



Registered Cable Address, "DYKE, ST. LOUIS," International Code.

Long Distance Telephone, Bell, Main 4212 M.

All previous quotations cancelled. Prices subject to change without notice. June 1, 1902.

INTRODUCTORY.



IN Presenting this Catalogue to the Trade it is with the utmost confidence in the goods herein described, as they have all been thoroughly tested. The goods herein illustrated are beyond the experimental stage, and the purchaser can feel assured he is getting exactly what he pays for and not buying an article which has not been thoroughly tested by actual use and therefore cannot be depended upon. We do not wish to make or sell poor, inferior apparatus with nothing to hold them up but advertising; what we do wish to do is to produce the best goods on the market at a reasonable price and establish a name among the Manufacturers and Dealers and users of Automobiles which will insure a legitimate and profitable business for years to come.

WE ARE THE ORIGINATORS of this line of business. The **First** concern in America, or possibly the world, was known as **The Automobile Supply Co.** This business was originated by **A. L. DYKE**, and they issued the **First Catalogue on Automobile Supplies in America.** This Company was organized and incorporated under the name of The St. Louis Automobile and Supply Co., who continued the manufacture of A. L. Dyke's machines, until they sold out, and Mr. Dyke started for himself.

From the valuable experience thus acquired, we are placed in a position to furnish all the latest and best Auto parts, and our testimonials will certainly show that our material is giving entire satisfaction.

IMPORTANT.

This Catalogue has been carefully compiled by us for the benefit of every one using this class of goods.

We trust, therefore, that it will be carefully preserved for future reference, and that we may be favored frequently with orders.

All Prices subject to change within the market.

All Claims must be made within 10 days after receipt of Goods.

All Packages Merchandise ordered sent by mail, will, unless explicit directions to contrary are given, be subject to charge for registration. The frequency of losses of goods sent in open mail, makes this rule imperative.

State whether you wish material shipped by Freight or Express.

Customers returning goods will please mark their names plainly on the boxes or packages, and advise us by mail, giving exact memoranda of articles returned, that we may make proper credits.

All prices quoted are based on the expectation of receiving funds par in St. Louis.

The collection of checks on local banks involves delay and expense, which especially in the case of very small amounts, cause inconvenience and considerable loss. We trust therefore, that our friends will remit us either in cashier's checks on some one of the larger cities, Postal or Express Money Orders, or Currency by registered mail.

Parties sending Stamps, will confer a favor by remitting those of the denomination of 1 cent or 5 cents, when it is possible. But Postage Stamps make a very undesirable currency.

"C. O. D." orders should be accompanied by at least 25 per cent. of the estimated amount of invoice to guarantee us against loss in case shipment is for any reason refused.

DISCOUNT TO THE TRADE.

REFERENCES.

Special report from Dun's or Bradstreets, or the Missouri Trust Co., where we do our Banking business.

A. L. DYKE,

1402 PINE STREET,

ST. LOUIS, MO., U. S. A.

DYKE'S No. 0 AUTOMORETTE. HYDRO-CARBON.

This machine is designed for general runabout purposes. It will carry two with ease, and the power and ease of operation will surprise you.

We do not sell this Machine completed, as shown in illustration, but we sell all the parts finished ready for assembling, or the Castings and Working Drawings.



THE ADVANTAGES OF GASOLINE AS A MOTIVE POWER.

- | | |
|--|---|
| First—It is absolutely safe. | Sixth—It is easier to operate. |
| Second—Its cost of operation is lower. | Seventh—It requires no technical knowledge. |
| Third—Its range of operation is greater. | Eighth—The fuel is obtainable everywhere. |
| Fourth—It requires less attention. | Ninth—It can be repaired at the roadside. |
| Fifth—It is more easily understood. | Tenth—It can be sold at a popular price. |

DESCRIPTIVE POINTS.

Power—Gasoline. **Engine**—Single cylinder, four cycle, developing three and one-half horse-power (others rate more for same size engine). **Ignition**—Jump Spark.

Cooling—Self-circulating or by means of small pump, as desired. **Drive**—To transmission, which gives a high and low gear by means of friction rings, then to sprocket or rear axle. **Running Gear**—Dyke's standard type, No. 0 Flexible Reachless Gear, with improved spring arrangement and radius rod. **Bearings**—Ball bearing front wheels and plain bronze rear axle bearings. **Rear Axle**—Solid from one end to the other, with improved compensating device. **Radius of Travel**—One tank of gasoline and one tank of water, 40 to 50 miles. Larger capacity of gasoline and water if desired. **Cost of Operation**— $\frac{1}{2}$ cent per mile. **Carburettor**—Dyke's Float Feed Carburettor. Positive in summer or winter. A proper mixture at all times, hence more power. **Combustion**—Complete. **Odor**—None. **Exhaust**—Almost noiseless. **Danger**—Absolutely none. **Tools**—Carried under front seat. **Spark Coil**—Dyke's Jump Spark Coil with Vibrator—operated on 6 volts and $\frac{1}{2}$ amperes. **Speed**—Variable up to 18 or 20 miles per hour. **Grades**—Will climb any ordinary grades. **Starting**—By crank. **Stopping**—Powerful Band Brake acting on rear differential. **Control**—Shifting igniter and lever "C" on Carburettor. **Alarm**—Dyke's "Goo-Goo" Chime, double tone gong. **Wheels**—28 inch wire tangent spokes. **Tires**—Pneumatic, 28x2 inch, or larger, as desired. **Weight**—About 500 pounds. **Seats**—2 people. **Dimensions**—78 inches over all.

EASE OF CONTROL—The Control is perfectly simple. You can start immediately at any speed the road will permit (up to 18 miles per hour) by merely pushing a lever forward. The guiding lever practically controls the speed and direction, and is handled as easily as a bicycle. One turn of the starting crank starts the engine. The vehicle can be stopped in its own length by pressing on a foot-brake lever.

SIMPLICITY—For our light machine we have patterned to some extent after the system adopted by the people of France, the home of the Automobile. The trend of all manufacturers of automobiles is toward simplicity. We have kept this one point in view above all others. In our experiments we have discarded all methods not easily mastered, employing all our skill toward perfecting an automobile which can be handled with little trouble.

THE DYKE

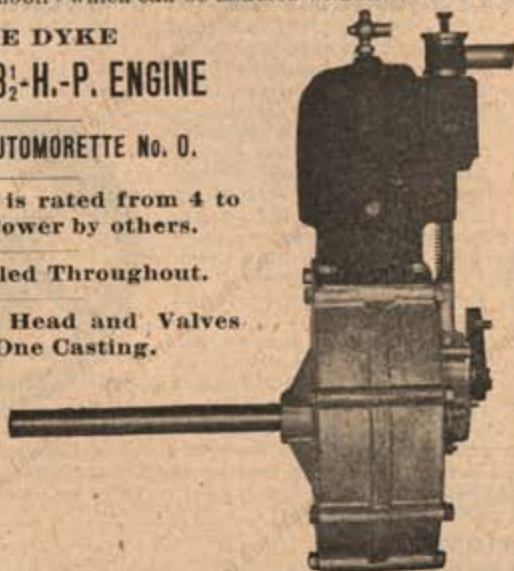
No. 0 or $3\frac{1}{2}$ -H.-P. ENGINE

USED ON AUTOMORETTE No. 0.

This Engine is rated from 4 to 5 Horse-Power by others.

Water Cooled Throughout.

Cylinder Head and Valves all in One Casting.



The above illustration shows Water-cooled $3\frac{1}{2}$ -Horse-Power Gasoline Engine.

The Cylinder, Cylinder Head and Valves are all in one casting.

We make the shaft any length when not used with No. 0 Machine.

Aluminoid Crank Case.

Two Fly Wheels run inside of Crank Case.

Self-oiling.

Jump Spark Ignition.

Shifting Igniter.

Speed from 200 to 1800 revolutions per minute.

Stroke, 4 inches. Bore, 4 inches. Crank Case, 12 inches in diameter. Width, 5 inches. Height, 22 inches. Weight, 110 pounds. Engine Shaft, $1\frac{1}{4}$ inches in diameter. We leave shaft projection of 8 inches, or longer if desired.

The following Accessories are necessary to operate the Engine: Carburettor, Spark Coil, Igniter Plug, Batteries and a Muffler.

No packing is used on this Engine, no facing and fitting of Head and Cylinder.

PRICE OF ENGINE, COMPLETE, WITH ALL ACCESSORIES \$160.00 List

PRICE OF ENGINE, WITHOUT ACCESSORIES 140.00 List

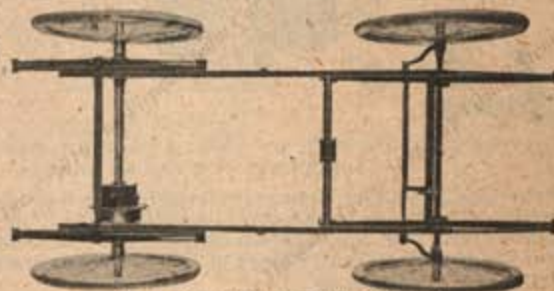
DYKE'S

No. 0

FLEXIBLE REACHLESS RUNNING GEAR



No. 0 RUNNING GEAR—SIDE VIEW.



No. 0 RUNNING GEAR—TOP VIEW.

Please take notice of the improved spring arrangement, doing away entirely with reaches; also note arrangement of radius rod, which keeps the chain at the proper tension at all times.

No binding of bearings on this gear. Front wheels independent of the rear wheels. When the springs go down the chain stays the same tension. The radius rod pushes the rear axle back.

Did you know that if you run your chain at an angle to the rear sprocket that it would jump the sprocket every time the springs went down—unless you was provided with a radius rod? Look this matter up. (See Running Gear pages.)

SPECIFICATIONS.

Track—41 in., or 4 ft. 8 in. **Wheel Base**—60 in. to 72 in.

Wheels—28 inches, wire. **Tires**—28x2 inches.

Width between Angle Iron Frame on Top—22 inches.

Length of Angle Iron Frame—66 inches.

Rear Axle— $1\frac{1}{4}$ inches. **Front Axle**—1 inch.

Differential—Inclosed, with Band Brake cast on same.

Sprocket—30 teeth attached to differential.

Springs—"Rubber Head" type, new arrangement.

Steering—By lever. Wheel or side steering at additional cost.

PRICE OF No. 0 GEAR, COMPLETE, LESS TIRES \$120.00 List

SET 28x2 INCH PNEUMATIC TIRES 35.00 List

SECTIONAL VIEW OF DYKE'S AUTOMORETTE No. 0.

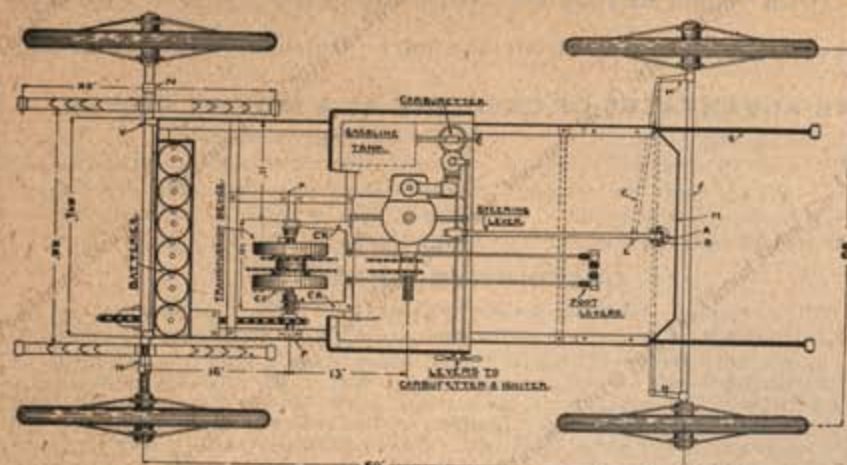


PLATE No. 3. TOP VIEW.

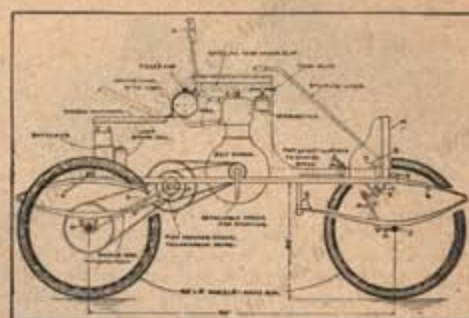
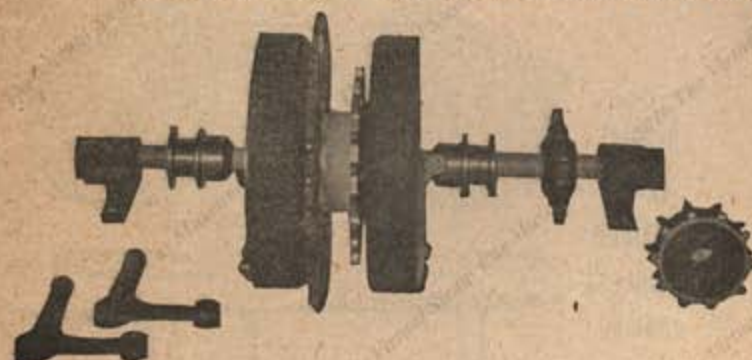


PLATE No. 2. SIDE VIEW.

THE ABOVE VEHICLE IS CONSTRUCTED IN BRIEF AS FOLLOWS:

On a set of springs of new arrangement is mounted two lengths of 1-inch angle iron; at front end two forgings receive the angle iron and at the rear a 1-inch steel bar goes across from one spring to the other. The engine is mounted on cross pieces of 1-inch angle iron, also the transmission device. Two 10-tooth $1\frac{1}{4}$ -inch sprockets are keyed to engine shaft. Two $1\frac{1}{4}$ -inch chains go from these sprockets to the two sprockets on transmission, one sprocket is 18-tooth and the other 30-tooth, $1\frac{1}{4}$ -inch. A 10 tooth sprocket $1\frac{1}{4}$ -inch is also on the transmission shaft, and a $1\frac{1}{4}$ chain goes back to rear sprocket on differential, which is 30-tooth. The engine is started by a crank, and either the low or high gear is thrown on by shifting the bell cranks "C 2." The speed is varied by operating levers to carburetor and igniter on the side (see Plate 3). By connecting the wiring with steering lever handle or grip the igniter connection can be interrupted, thereby causing the engine to slow down, etc., in crossing car tracks, etc. This little machine will do good work if properly cared for and makes very little noise.

DYKE'S No. 0 TRANSMISSION AND ACCESSORIES FOR No. 0 MACHINE.



No. 0 TRANSMISSION WITH SPROCKETS, BEARINGS, SHIFTING FORKS AND SPROCKETS FOR ENGINE SHAFT.

When very steep hills are encountered it is then necessary to throw on the low gear, as this low gear requires less power from the engine. It is possible on a level or slight grade to go as slow as desired even with the high gear by varying the spark and valve on carburetor. The No. 0 Transmission device is designed for the light No. 0 Machine, but is also suitable for other machines not over 550 pounds weight. Made of best material throughout with vital parts case hardened.

With all automobile gasoline engines it is necessary to have a device for at least two variations of speed. These are called transmission devices. The above device has a variation of two speeds. When the engine is first started by a quick turn on the crank, which is placed on the engine shaft, the engine runs alone. In starting the machine the low gear is thrown on, and after the vehicle is in motion the high gear is thrown on, which makes the vehicle go faster, and if still greater speed is required the lever on carburetor is shifted forward.



END VIEW No. 0 TRANSMISSION

SPECIFICATIONS.

Speed—2 forward.	Weight—29 pounds.
High Gear Sprocket—30-tooth $1\frac{1}{4}$ inch. ($1\frac{1}{8}$ extra, \$3.)	Total Length of Shaft—18 inches.
Low Gear Sprocket—18-tooth $1\frac{1}{4}$ inch. ($1\frac{1}{8}$ extra, \$2.)	Diameter of Shaft— $\frac{1}{4}$ inch.
Drive Sprocket Going to Differential—10-tooth $1\frac{1}{4}$ inch.	Shaft Bearings—Bronze, made to bolt to angle iron frame.
Sprocket on Engine Shaft—2-10-tooth $1\frac{1}{4}$ in. ($1\frac{1}{8}$ extra \$1.)	Friction Lever and Special Ball is of hardened steel adjustable to wear.
Price of No. 0 Transmission Device, complete with Sprockets and Shifting Levers or Forks.....	List. \$38.00
No. 0 Transmission Device in the rough, all Castings and Working Drawings.....	18.00
We make this Transmission device with $1\frac{1}{8}$ sprockets instead of $1\frac{1}{4}$ and also longer length of shaft at slight additional cost when parties desire it.	

No. 0 OUTFIT, PARTS FINISHED, WITH WORKING DRAWINGS.

The following is a list of principal parts necessary to construct Automorette No. 0.		List.
No. 0 Engine, complete with all accessories, including Col. Carburetor, Muffler, Plug, Batteries, etc.....	\$160.00	Hose for connecting tank..... \$3.00
No. 0 Running Gear, complete, less tires.....	120.00	$\frac{1}{2}$ -inch Copper Pipe for connecting carburetor with gasoline tank..... 1.50
No. 0 Set 28x2-inch Pneumatic Tires.....	35.00	Insulated Wire for connecting igniter with batteries..... 1.00
No. 0 Transmission Device, complete.....	38.00	1 Double Chime Gong..... 3.50
10 feet $1\frac{1}{4}$ -inch Baldwin detachable chain, at 50c.....	5.00	1 Two-point Switch..... 50
5 feet $1\frac{1}{8}$ -inch Baldwin detachable chain, at 55c.....	2.75	Radiating Tube (optional)..... \$35.00
Working Drawings Automorette Body.....	4.00	Pump (optional)..... 6.50
Gasoline Tank.....	10.00	
Water Tank.....	10.00	

No. 0 Engine Castings.

This is undoubtedly the most complete set of Engine Castings offered by any concern. We include everything necessary to build this Engine, together with a good clear set of Working Drawings.

A set of No. 0 $3\frac{1}{2}$ H. P. Engine Castings consists of all Iron, Brass, Bronze and Composition Castings; Cylinder, Cylinder Head and Valves all one Casting.

Aluminoid or Iron Crank Case.

Two Balance Wheels with Counter Weights.

Piston.

Ring Casting.

Gear Case Cover.

Igniter Cover.

Inlet Valve.

Exhaust Valve Guide.

Muffler Castings.

Connecting Rod—Bronze.

Main Shaft Bearing Bushings—Bronze.

Exhaust Gear Blanks—Brass.

Exhaust Valve Forging.

Inlet Valve Forging.



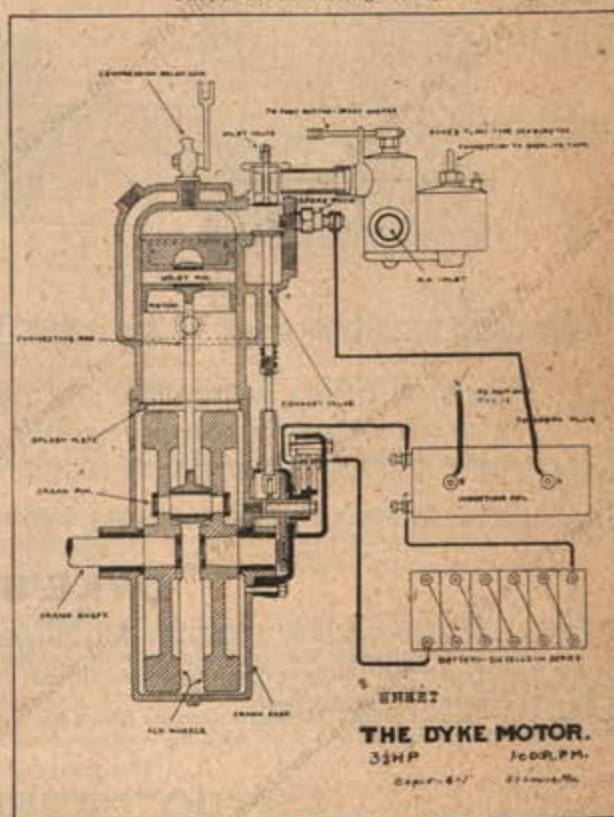
Partial Set of Castings of $3\frac{1}{2}$ H. P. Engine.

	List.
Price of Castings for $3\frac{1}{2}$ -H. P. Engine, cast iron base	\$30 00
With Aluminoid Crank Case Instead of Iron	40 00

PRICE OF MACHINE WORK.

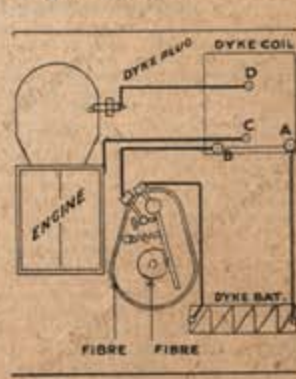
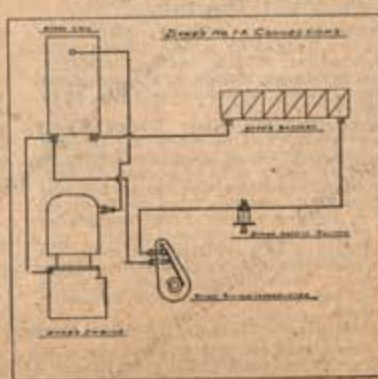
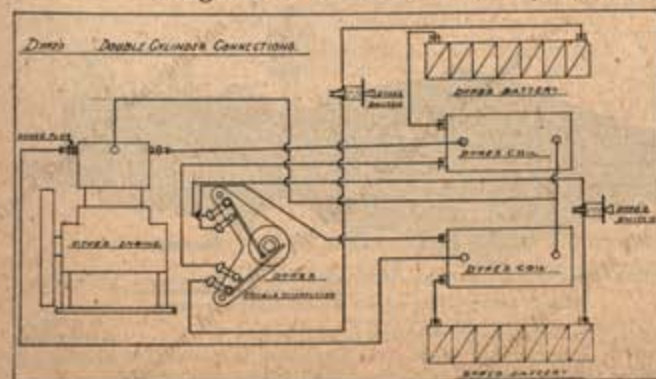
$3\frac{1}{2}$ Horse Power No. 0 Engine.

	Net.
Set of Bolts, Nuts, Springs and Valves	\$25 00
Boring Cylinder and Facing	5 00
Finishing Cylinder, complete	10 00
Igniter, complete	6 00
Fitting Piston and Rings	4 00
Turning up Crank Shaft and Fly Wheels and Fitting	18 00
Turning up and Cutting Exhaust Gears (2)	2 50
All parts for Igniter, including fibre, screws, plates, etc., machined, but not assembled	5 00
Turning tongue and groove and boring and fitting crank cases	18 00
Casting for stand to put under engine when running engine for stationary purpose	2 00



Sectional view of $3\frac{1}{2}$ H. P. Engine showing plan of connection, etc.

Diagram of Connection for Dyke's Jump Spark Coil for Various Systems of Ignition.



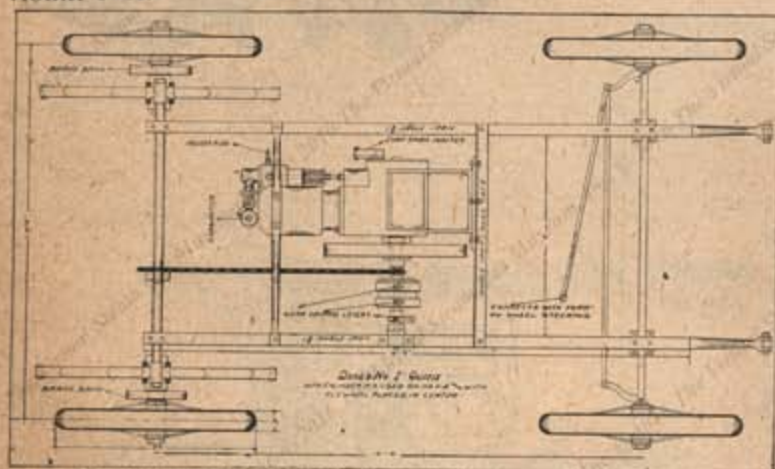
DYKE'S NO. 1 OUTFIT.

This Machine is a very desirable one for rough usage. It is a medium weight vehicle and very powerful for its size. The engine used is **Dyke's No. 1 6-H.-P. Engine.** The Engine is water-cooled, water being carried in a pair of copper corrugated tanks placed in the side of the body. Water has a natural circulation—no radiating tubes or pump is necessary. The Transmission gives two speeds ahead and reverse. The running gear is Dyke's No. 1 Gear. Wheels are wood or wire, 28-inch diameter, with a 3-inch pneumatic tire. We furnish, however, any size tires or wheels desired. Larger Tires at additional cost.



DYKE'S No. 1 OUTFIT MADE UP COMPLETE

The Tank in the side of the body can be left out if desired, but it will be necessary to use a Radiator and Pump and place tank inside in rear.

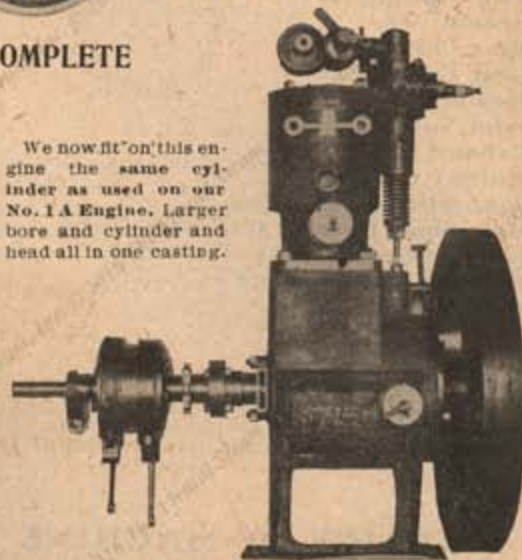


TOP VIEW OF DYKE'S REGULAR No. 1 OUTFIT.

NOTE SIMPLE CONSTRUCTION THROUGHOUT.

We can furnish this outfit with fly wheel in center if desired. See illustration above, preferred.

We now fit on this engine the same cylinder as used on our No. 1 A Engine. Larger bore and cylinder and head all in one casting.



NO. 1 HORIZONTAL TYPE DYKE'S 6-H.-P. GASOLINE ENGINE.

(With Transmission Direct Connected.)

We now supply either Upton or Champion Transmission, as shown on page 9, if desired. We also supply the Upton Encased Transmission, if

By purchasing these parts any ordinary mechanic can easily put this machine together.

DYKE'S OUTFIT No. 1.

Dyke's No. 1 Horizontal Type Engine, with cylinder head all in one casting and water cooled around the valves, including all accessories, which are: Carburetter, Jump Spark Coil, Jump Spark Plug, Battery, Oil Cup, Starting Crank and Muffler. Price \$225 00
 No. 2 Transmission Device, complete, with Coupling, Sprocket, Outer Bearing, etc. Price 100 00
 Dyke's No. 1 Flexible Reachless Running Gear, with 28x3, or 30x3, or 32x3 wire or wood wheels, complete, less tires 142 00
 One Set 28x3 Pneumatic Tires at \$15 each 60 00
 10 Feet 1 1/2 x 3/4 Baldwin Roller Chain 15 00
 Copper Corrugated Water Tanks, to go in the side of the body 15 00
 Body in the white 32 00

This makes up a regular \$1,000 machine.

No trouble whatever in assembling our machines. They are simple.

Wheel Steering, extra

Radiator and Pump, instead of Copper Corrugated Tanks

Any of the articles listed that you can make up yourself you may deduct net price of same.

Steel Rims for Wood Wheels extra.

\$18 00

41 00

Specifications Dyke's No. 1 Engine.

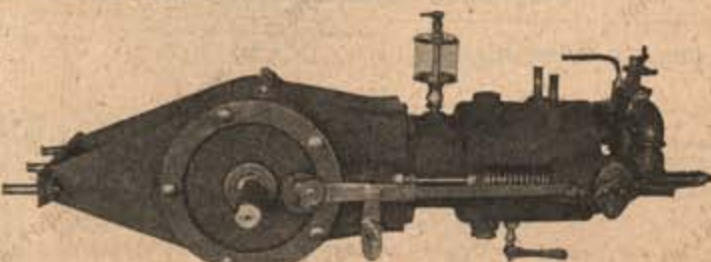
Horse Power, 6; Bore, 5 1/4 inches; Stroke, 6 in; Speed, 200 to 900; Weight, complete, with fly wheel, 290 lbs.; Weight fly wheel, 110 lbs.; Diameter fly wheel, 22 inches; Face of fly wheel, 2 inches; Width, vertical position, from outside of bearing to outside of fly wheel, 15 inches; Height, from bottom crank case to top, in horizontal position, 9 inches; Length, 30 in. Weight of Engine with fly wheel 275 lbs.

This Engine is equipped with Dyke's New Float Feed Carburetter, making it the most powerful engine made for its size. Also allows the engine to be throttled from low to high speed, as effectively as a steam engine. Crank Chamber and all parts easy of access. Jump-Spark Igniter. Center Crank running in oil together with cut steel gears operating valves. The crank shaft is forged. Diameter of shaft on all bearings, 1 1/2 inch; 1 1/4 inch diameter to receive sprocket and remainder of shaft 1 1/8 inch diameter.

We say our Engines are Improved Engines because they run with less noise, less vibration, less oil, and less odor than any Engine made. They are made of the best material throughout. We will make good any parts breaking, etc., within six months after sale, providing the fault is with the Engine and not from neglect or misuse.

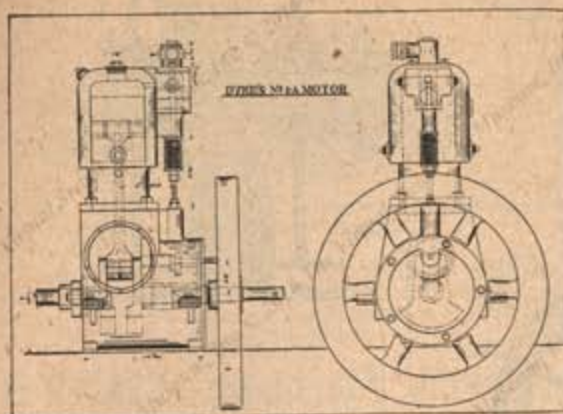
PRICE (complete, with all accessories, including Carburetter, Muffler, Battery, Coil, Relief Cock, Starting Crank, etc.) \$225 00

REMEMBER—The cylinder and head valves are all in one casting and there is no packing used. This Engine is water cooled around the head, valves and cylinder. Special size and length shaft furnished on order. Three years' actual test. Write some of our customers.



Horizontal view of No. 1 Engine, with old style Igniter shown. We now furnish Dyke's Improved Jump Spark System.

DYKE'S 6 H.-P. TONNEAU.



Sectional View Dyke's No. 1A Engine.

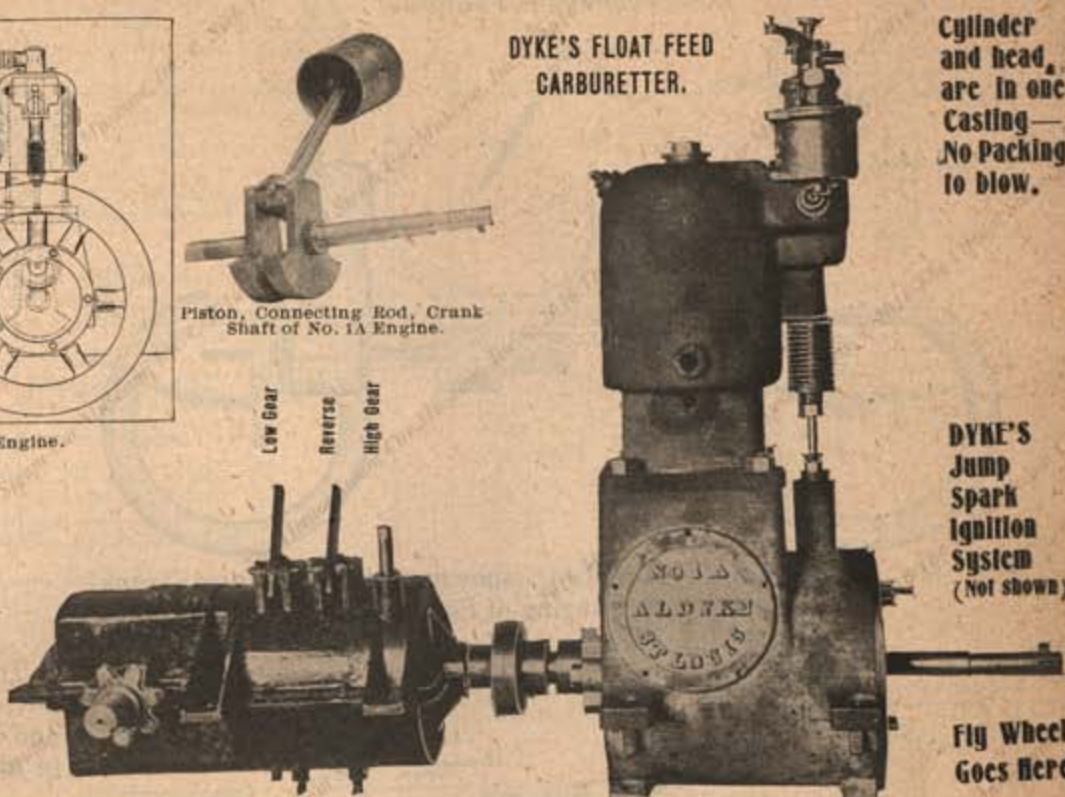


Piston, Connecting Rod, Crank Shaft of No. 1A Engine.

DYKE'S FLOAT FEED CARBURETTER.

Cylinder and head, are in one Casting—No Packing to blow.

THIS TRANSMISSION DEVICE, together with the Bevel Gears, are encased and running in oil, no noise, free from dust.



DYKE'S Jump Spark Ignition System (Not shown)

Fly Wheel Goes Here



6 H.-P. Tonneau completed. Rear Tonneau detachable.

No. 1A Outfit, Our Standard and Latest Type Machine.

No experiment, but simply our No. 1 Machine improved. Our regular No. 1 Machines have given satisfaction, as the numerous testimonials from our customers will show. The 6 h.-p. Tonneau is an improvement over the regular No. 1.

Weight approximately 1200 lbs. Two speeds, forward and reverse. Variation of speeds obtained by means of carburetter and shifting igniter. Long wheel base; any size tires.

Exhaust entirely muffled and odorless. Dyke's Flexible Reachless Running Gear used. Vertical engine placed in front. Transmission device direct connected to engine shaft. Positively the simplest machine ever constructed.

POWER—Gasoline. **ENGINE**—Single cylinder, 4 cycle, developing 6 h.-p. Cylinder and head all in one casting. **IGNITION**—Jump spark, variable igniter. **COOLING**—Water circulated by pump through radiating tubes. **TRANSMISSION**—Sun and planet type, direct connected to engine shaft through mitre gears to countershaft, countershaft connected to sprocket on rear axle by means of 1 1/4 x 1 1/2 roller chain. **BEARINGS**—Roller bearings on rear axle or ball or roller on front wheels. **RUNNING GEAR**—Dyke's Flexible Reachless Gear, with improved spring arrangement and radius rod for keeping the chain at proper tension. **REAR AXLE**—Solid from one end to the other, spur gear differential. **GASOLINE**—Carried in cylindrical tank hung under rear of vehicle, with 4 lbs. air pressure to lift gasoline to carburetter. **CAPACITY OF GASOLINE**—100 miles or more. **WHEEL STEERING**.

DYKE'S 6 H.-P. TONNEAU OUTFIT. OR No. 1A OUTFIT.

DYKE'S No. 1 FLEXIBLE RUNNING GEAR, complete (less tires)	\$142 00
DYKE'S 6 H.-P. No. 1A ENGINE, complete with all accessories, including Carburetter, Coil Bat, etc.	225 00
DYKE'S No. 1A TRANSMISSION DEVICE, complete with Collars, Bearings, Bevel Gear, and Counter-Shaft, 1A type enclosed and running in oil	150 00
Radiating Outfit	35 00
10 ft. 1 1/4 x 1/2 Bald. Detachable Roller Chain	15 00
Working Drawings of Body	5 00
Pump for circulating water	6 50

Cost on tires given on another page. We furnish any size wheel, wire or wood, desired. For prices see Running Gear List. The standard used is 30-inch wheels for 3-inch pneumatic tire. Wheels for 4-inch tires extra.

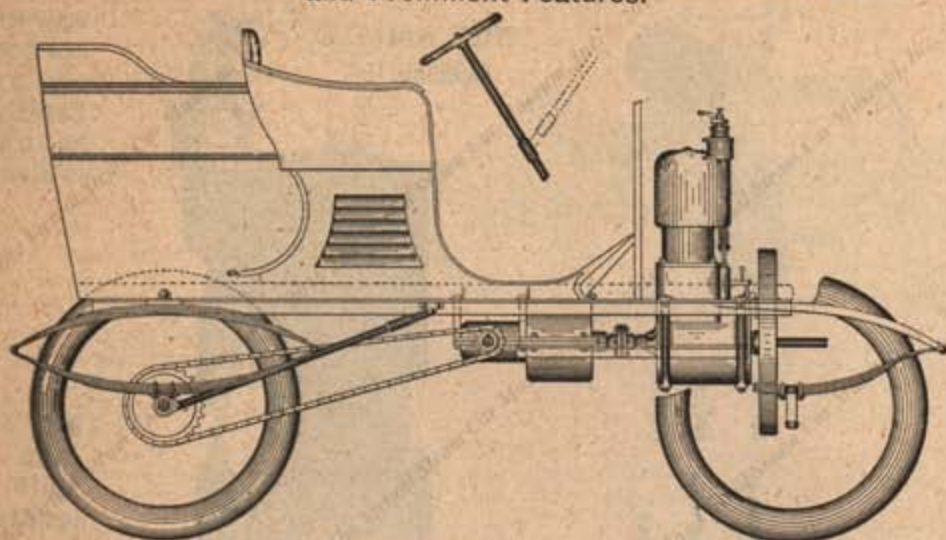
Please bear in mind that you could not buy a machine of this type for a cent less than \$1200.

We can supply our Running Gears fitted with Midgely Tubular Wheels or American Tubular Wheels, also with Band Brakes attached to rear axle, at extra cost.

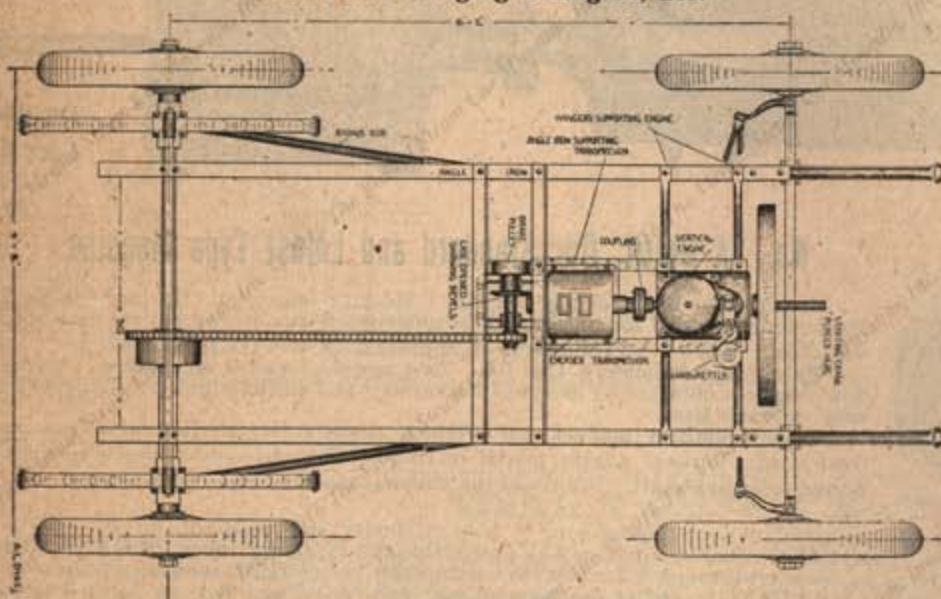
The ENGINE has features which no other Engine has. The TRANSMISSION has features which no other Transmission has. The Running Gear has features which no other Gear has.

We firmly believe that our Transmission and Engines are the Best Engines in America, France, Germany, or any other country.

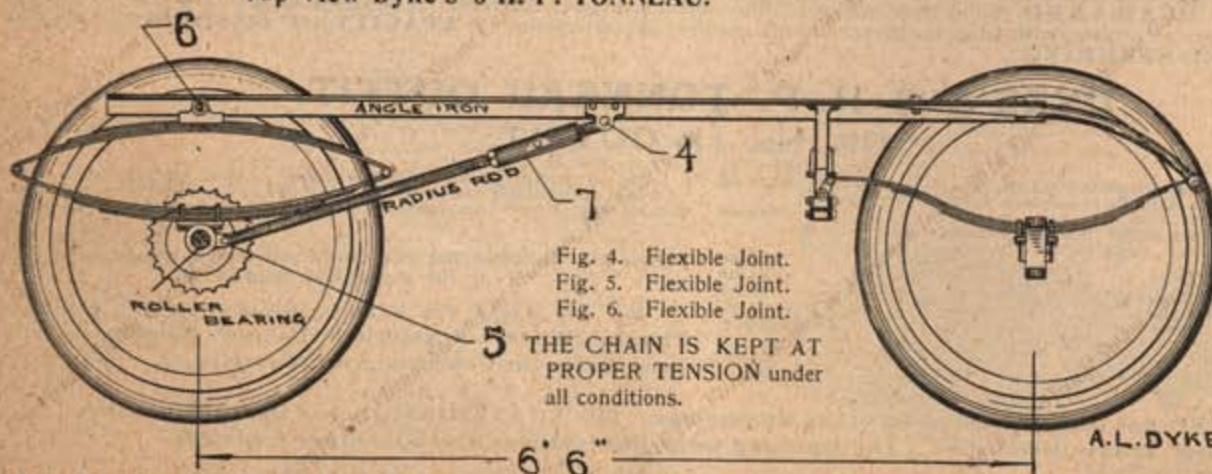
THE SUPERIOR FEATURES OF
• DYKE'S 6-H.-P. GASOLINE TONNEAU, •
 SHOWN BY ILLUSTRATIONS.
 Ask yourself if there is any one Machine with as many Original
 and Prominent Features.



Side View Dyke's 6-H.-P. TONNEAU, showing arrangement of Transmission and Hanging of Engine, Etc.

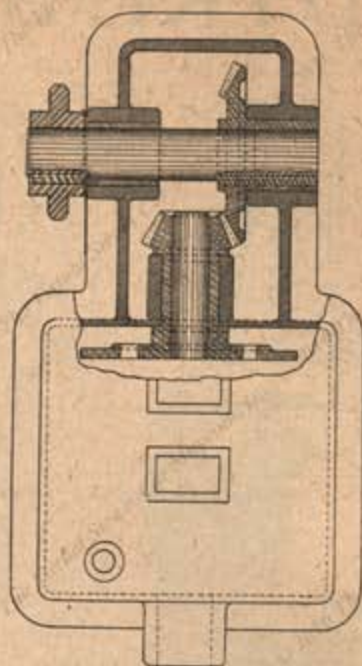


Top View Dyke's 6-H.-P. TONNEAU.

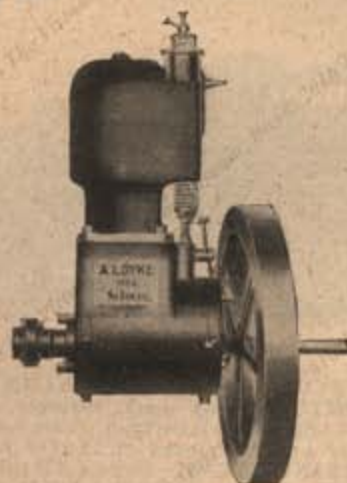


Side Sectional View of Dyke's Flexible Reachless Running Gear, as used on 6-H.-P. Tonneau Engine; it is hung from angle iron.

WE ALSO HAVE A NO. 2A OUTFIT, WITH DOUBLE CYLINDER 9-H.-P. ENGINE.



Transmission used on Dyke's 6-H.-P. TONNEAU. Change Gears and Bevel Gears encased, running in oil.



VERTICAL TYPE Engine used on Dyke's 6-H.-P. TONNEAU. Cylinder and Head all in one casting. Dyke Jump Spark System of Ignition Dyke Float Feed Carburetter used.

A.L.DYKE

DYKE'S No. 3 OUTFIT.



but for truck work also. A piano wagon is being successfully operated by one of these engines.

Our object is to supply you with the **Engine** complete, **Running Gear** complete and **Transmission** device. You can then put the Engine on the Gear and put any style body on same you desire.

DYKE'S 10-H.-P. ENGINE.

Same General Style as No. 1 but double cylinder.



Weight, about 375 lbs.; Width, 28 in.; Fly Wheel, 2x22; Height, 40 in.; Cylinders, 5x6 in. each; Speed, 200 to 800 revolutions per minute.

These Engines are very powerful, easy to start, and superior to any on the market. The 10-H.-P. or No. 3 Engine is propelling a 3,000 lb. wagon every day.

Price, Engine complete, with all accessories, Jump Spark Ignition, variable speed..... \$350

DYKE'S No. 3 OUTFIT.

1 No. 3 Engine, complete with all accessories, including Oil Cups, Carburetter, Coils, Tanks, Plugs and Batteries	List. \$350 00
1 No. 2 Running Gear	160 00
1 No. 3 Transmission Device, with Couplings and Outer Bearings, etc.	125 00
10 Feet 1½x½ Roller Chain, at \$1.85	18 50
1 Double Radiating Outfit	55 00
1 Circulating Pump	6 50

The above list includes the principal parts of the outfit. For tires you can select what you desire on another page. See Running Gears on page 10.

DYKE'S GASOLINE MARINE ENGINES.

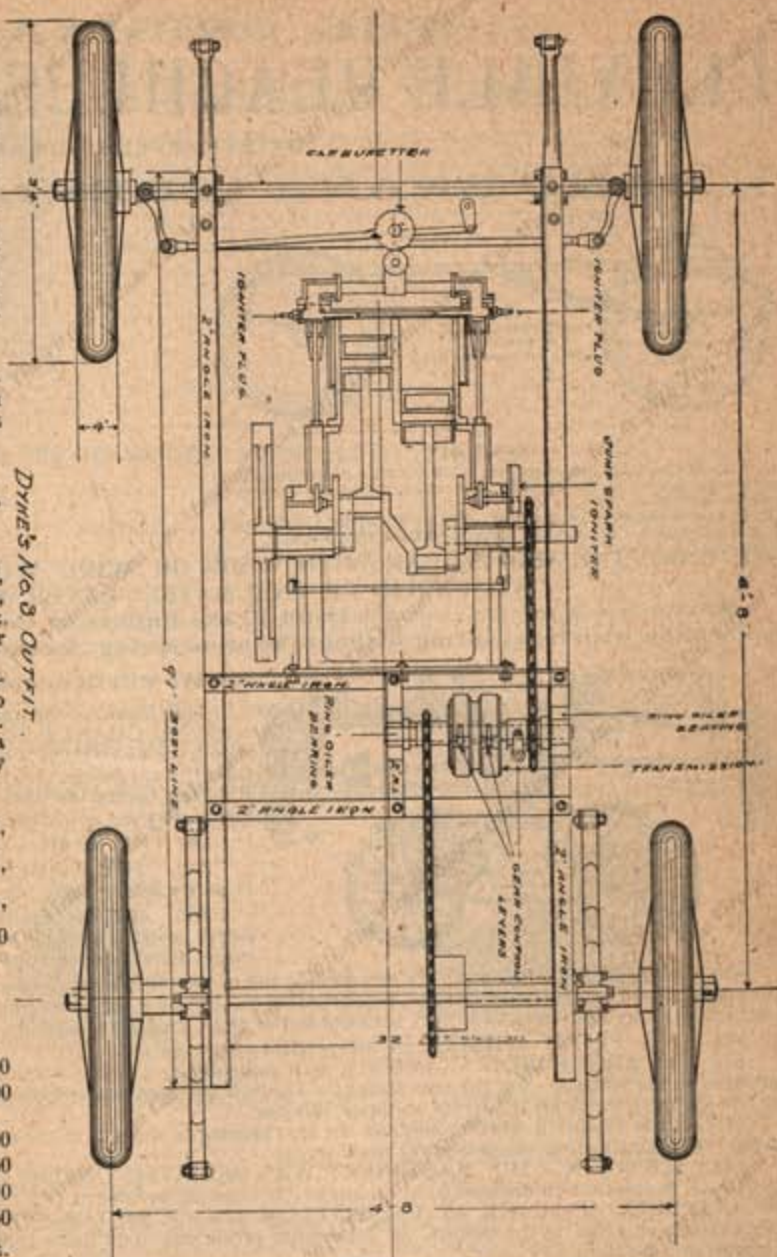
Are offered to the public with every confidence that they are nearer perfection than any other yet on the market. They are the results of years of experimenting, and embrace novel and important improvements.

EASY TO START. EASY TO CONTROL.

All engines are fitted with reversible propeller wheel and muffler. engines are thoroughly tested before leaving the works. Our engines are fitted with ball bearing thrusts.

PRICES.

	STROKE.	BORE.	WEIGHT.	FLOOR SPACE.	List
2-horse-power	3¾	3¾	120 lbs.	6 in. x 11 in.	\$160 00
4-horse-power	5¾	5¾	280 lbs.	9 in. x 14 in.	325 00
6-horse-power	6¾	6	375 lbs.	10½ in. x 16 in.	450 00
8-horse-power, double cylinders	5¾	5¾	560 lbs.		650 00
12-horse-power, double cylinders	6¾	6	750 lbs.	16 in. x 21 in.	775 00
20-horse-power, triple cylinders	6¾	6	1150 lbs.	16 in. x 31 in.	1,000 00



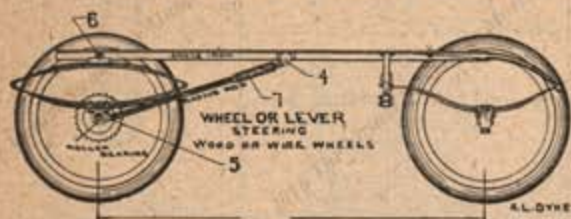
TOP PLAN VIEW OF DYKE'S No. 3 OUTFIT ASSEMBLED.



THE ORIGINAL DYKE'S FLEXIBLE REACHLESS RUNNING GEAR

(PATENT APPLIED FOR AND GRANTED.)

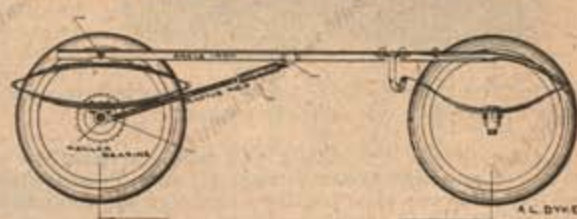
BAND BRAKE WHEELS ON REAR HUBS.



STYLE A.

This style of spring support, with forking running across from one side of angle iron to the other, is the style we generally supply.

Fig. 4—Flexible Connection. Fig. 5—Flexible Connection. Fig. 6—Flexible Connection. Fig. 7—TURNBUCKLE.

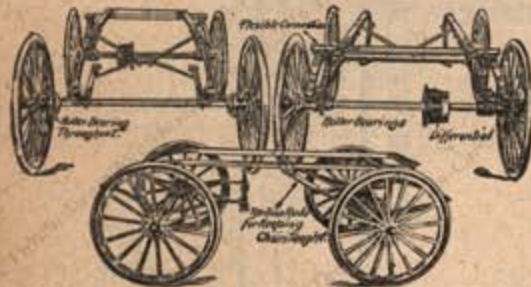


STYLE B.

The above illustration shows Dyke's Running Gear with side spring support. This does away with the forking running across the gear. This type of spring support is generally used for cars where the engine is placed in front.

WE MAKE THE ABOVE GEAR WITH WOOD OR WIRE WHEELS AND ANY SIZE TIRES FITTED EITHER WITH SOLID OR PNEUMATIC. LEVER, SIDE OR WHEEL STEERING.

We now supply this Gear with Band Brake Pulleys on the Rear Hubs at extra cost. We also make connection with front spring without the cross spring, leaving no obstruction across the gear, when desired.



We will fit double acting Band Brake on these gears for \$20 extra.

This Gear, as the name implies, is FLEXIBLE and REACHLESS. There is absolutely NO CHANCE OF BINDING OR STRAINING any part of this Gear. Those who have had trouble with the tubular and other style of Running Gear will appreciate fully the advantage this Gear has over other Gears. To those who are not familiar with Running Gears we will give a few reasons why our Gear is more suitable for Automobile work than any other Gear made:

1st. THE REAR AXLE IS SOLID from one end to the other.

2nd. THE COMPENSATING DEVICE is compact and the steel spur gears run in an enclosed case of oil.

3rd. ALL OF OUR WHEELS ARE MADE SPECIAL—the rear hubs having a flange projection. Our wire wheels are more substantial than others, because they are made with heavier hubs and to our own design.

4th. THE REAR SPRINGS are mounted on top of the roller bearing case. The front springs, which are also special and different from others, is clipped to the front axle, and supported on one end by a bar extending across an angle iron frame. The front of the springs are fastened to a forking, which in turn is fastened to the angle iron frame.

5th. THE FRONT WHEELS are independent of the rear.

6th. AN ANGLE IRON FRAME (1 1/4-inch angle iron or 2-inch), which is supposed to receive the Engine, Transmission and Body, is mounted on the springs. On the rear springs a 1 1/4-inch bar goes across from one spring to the other. This bar works on bearings mounted on the springs; the angle iron rests on top of this bar.

7th. THE RADIUS ROD goes from the rear bearing to the side of the angle iron, both being free to work with the motion of the carriage. A turnbuckle adjusts tension of chain.

8th. SUPPOSING THE MACHINERY WAS MOUNTED ON THE ANGLE IRON FRAME, and a chain from the Transmission went back to sprocket on differential at an angle. In crossing an obstruction the frame would GO DOWN, and on other gears the CHAIN WOULD BECOME SLACK AT THE BOTTOM AND JUMP THE SPROCKET. In our gear the radius rod forces the rear axle back exactly in proportion to the amount of depression of springs, and there being a flexible connection the chain cannot become slack, nor can there be any binding.

9th. WE GIVE MORE Running Gear for the same amount of money than others.

10th. WITH THESE ADVANTAGES OF FLEXIBILITY, the machine will require less power to propel and will OUTLAST TWO OF ANY OTHER MAKE, which goes to prove that "the best is the cheapest" in the long run.

In comparing prices, please note that we furnish Springs, Angle Iron mounted on Special Springs and Special Forgings, Radius Rod and other parts not included in on other Gears. Read the advantage of our Gears.

The prices do not include tires or rims on wood wheels. It includes rims, however, on wire wheels. WE USE ROLLER BEARINGS ON OUR No. 0, No. 1 AND No. 2 GEARS, whether wire or wood wheels or ball or roller are used in front.

PRICE ON DYKE'S FLEXIBLE REACHLESS RUNNING GEARS. (Made in 3 Standard Sizes.)

We can put on any size sprocket desired, but if not standard, it may take a little longer time for delivery.

	Style of Wheels.	Size of Sprocket on Rear Axle.	Size of Front Axle.	Size of Rear Axle.	Wheel Base.	Track.	Style Bearings on Rear Axle.	Size of Hollow Shaft.	Approximate Weight of Gear.	List Price with Ball Bearings in Front Wheels.	Price with Roller Bearings in Front Wheels Extra.
	Wood or Wire, 25 to 34 in. For Solid or Pneumatic Tires.	30-tooth, 1 1/4 Block.	1 in.	1 1/2-1 3/4 in.	60 to 72 Inches.	4 ft. to 4 ft. 8 Inches.	Roller.	1 1/2 in.	With Wire Wheels, 150 lbs.	\$120.00	
No. 1.	Wood or Wire, 25 to 34 in. For Solid or Pneumatic Tires.	24-tooth, 1 1/4 Roller.	1 1/4 in.	1 1/2 in.	66 to 80 Inches.	4 ft. 6 in. or 4 ft. 8 in.	Roller.	2 in.	330 lbs.	\$142.00	\$10.00 Net
No. 2.	Wire or Wood Wheels for Solid or Pneumatic Tires.	24-tooth 1 1/4 Roller.	1 1/4 in.	1 1/4 in.	72 to 82 Inches.	4 ft. 6 in., 4 ft. 8 in. or 5 ft.	Roller.	2 1/4 in.	400 lbs.	\$160.00	\$16.00 Net

Extra for Band Brakes fitted to rear axles, \$20 00.

Extra for Wheel Steering Device, \$18 00.

Extra for Side Steering Device, \$12 00.

Extra for Lever Steering Device, \$6 00.

No. 0 and No. 1.—The price is based on using 2 1/2 in. rims, if wire wheels are used. If 3 in. rims are used, add \$3.50. If 4 in., add \$4.50. On the No. 2 Gear we supply 3 in. rims on wire wheels and \$3.50 extra for 4 in. rims.

We do not supply rims for wood wheels, only at extra cost. See cost of rims and add \$2.00 for putting on. The sprocket can be placed at any point desired on rear axle. Brown-Lipe Differentials used.

See The above gears supplied with Concord Wood Wheels, see page 11—If Dyke's Wood Wheels are desired add \$10.00.

ARTILLERY HUB

Automobile Wood Wheels.

FRONT WITH BALL-BEARINGS AND REAR-KEYED, WITH SOLID RUBBER TIRES.

We call special attention to the fact that our facilities in turning out high grade wheels equipped with tires, are unsurpassed. We carry as distributors, a large stock of high grade rubber, and apply it to our own wheels in our own shops. Every foot of rubber which we sell is of guaranteed quality, and in supplying it as direct factory agents, we can guarantee the highest excellence with all intermediate profits excluded.

15/16 in. spoke, 6 1/2 in. hub, 3/4 in. channel rim and rubber put on	\$42 50
1 1/8 " " " " " "	46 50
1 1/4 " " " " " "	50 00
1 3/8 " " " " " "	54 50
1 1/2 " " " " " "	58 50
1 5/8 " " " " " "	64 50
1 3/4 " " " " " "	69 50

Above prices include all wheels from 28 to 36 inches, larger sizes special. Balls in Front and Rear Boxing included.

PRICE ON CONCORD HUB WOOD WHEELS WITHOUT TIRES.

	Plain.	Diameter	Ball Bearings in Front, Keyed Box in Rear and Caps.	Roller Bearings in Front-Keyed Box in rear and Caps.	If one rear wheel is bored and fitted to take hollow shaft, add extra.
No. 0 Size, per set (as used on No. 0 Gear)	\$15 00	22 to 36 in.	\$18 00	\$	\$1 00 (1 1/2 in.)
No. 1 Size, per set (as used on No. 1 Gear)	16 50	22 to 36 in.	19 50	32 00	3 50 (2 in.)
No. 2 Size, per set (as used on No. 2 Gear)	19 00	22 to 36 in.	23 00	40 00	3 50 (2 1/4 in.)

The above prices do not include Knuckles. The Standard Sizes generally used are 28, 30 and 32 inch.

THE CONCORD WHEEL

Described below is the Wheel which we supply with **Dyke's Flexible Reachless Running Gear**. It is a good Wheel, but if you wish one which is still better see Dyke's Auto Wood Wheels.



CONCORD.

The Back Flange and Axle-box.
(Cast in one piece.)



CONCORD.

The Front Flange and Bolts.



CONCORD.

The Completed Hub.
A Bolt between every other Spoke.

No. 0 size is for Machine not over 700 lbs.

No. 1 size is for Machine not over 1400 lbs.

No. 2 size is for Machine not over 2800 lbs.

DYKE'S AUTO WOOD WHEELS

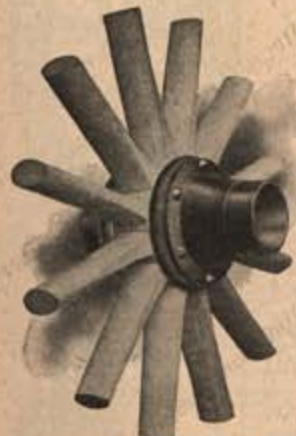
Are special made and are superior to any on the market. Front wheels with Timken Roller Bearings. These wheels have fine metal hubs and will outlast several Sarver or other make wheels. We make these wheels from 22 to 36 inches diameter to take any size solid or pneumatic tire.

HUBS.

Note the superiority of my wheels. They will outlast three sets of any other style. They are the only strictly Automobile Wheels made. The Front Hubs are of brass and steel. Spokes are bolted in and roller bearings fitted. The Rear Hubs are also of brass and steel with receptacle for spokes milled. Each spoke is firmly bolted. The Rear Hub also has a flange projection for bolting to collar. A glance at the illustration will explain.



DYKE FRONT WHEEL.



CONCORD, after spokes are driven.



CONCORD WHEEL.

With Bands Shrunk on by a We-t Hydraulic Hub Bander.

THE DYKE AUTO WHEEL

Is made throughout of Brass and Steel and fitted with Ball or Timken Roller Bearings. These wheels cost us more than the CONCORD and if purchasers of Running Gears wish something which is the best that can be made, we recommend this wheel. The CONCORD is a good wheel and is the wheel which we supply with our Running Gears at prices listed on Page 10.

If you desire the DYKE AUTO WOOD WHEEL, add \$10 to list of prices of wheels above and \$10 to list on Running Gears, Page 10.

We do not supply Steel Hubs with wheels.



DYKE REAR WHEEL, Showing Flange with Rim attached.



DYKE FRONT HUBS.

DYKE REAR HUBS.

AUTOMOBILE WIRE WHEELS.

Our Standard Type is made up in three weights, as follows:

- No. 0.—Consisting of four wheels—Two front wheels with ball bearings, cones to take $\frac{1}{4}$ -in. spindle, 40 No. 11 spokes to the wheel, set tangent, each spoke guaranteed to stand a tensile test exceeding 1,400 pounds. Rims 28 or 30 in., taking 2 or 2½-in. tires, and with flared edges to prevent chafing. Hubs and spokes finished in heavy nickel, rims enameled. The two rear wheels of same general construction, but reamed $\frac{1}{4}$ -in. and key seated for axle. Per set **\$35 00**
- No. 1.—Consisting of four wheels—Two front wheels with ball bearings, cones to take $\frac{1}{4}$ -in. spindle, 40 No. 9 spokes to the wheel, set tangent, each spoke guaranteed to stand a tensile test exceeding 2,000 pounds. Rims 28 or 30 in., taking 2½ or 3-in. tires, and with flared edges to prevent chafing. Hubs and spokes finished in heavy nickel, rims enameled. The two rear wheels of same general construction, but reamed 1-in. and key seated for axle. Per set **\$30 00**
- No. 1½.—Consisting of four wheels—Two front wheels with ball bearings, cones to take 1-in. spindle, 40 No. 9 spokes to the wheel, set tangent, each spoke guaranteed to stand a tensile test exceeding 2,000 pounds. Rims in any diameter, taking 2½ or 3-in. tires, and with flared edges to prevent chafing. Hubs and spokes finished in heavy nickel, rims enameled. The two rear wheels of same general construction, but reamed to 1½-in. and key seated for axle. Per set **\$40 00**



For Prices of Rear Axles, write us, giving sizes.

Suspension Steel Ball Bearing Carriage Wheels.



- SET No. 1.—(4 Wheels)—32 in. and 34 in., or 34 in. and 36 in., with rims to suit 1½ in. or 2 in. pneumatic tires, dust caps and collars nicked, balance of wheel to paint. Per set **\$18 00**
- SET No. 2.—Same as above, but with hubs machined for 5½ in. long distance or other axles. Per set **16 00**
- SET No. 4.—(4 Wheels)—32 in. and 34 in., or 34 in. and 36 in., with rims for 2½ or 2¾ in. pneumatic tires, nicked dust caps and collars, balance to paint. Per set **22 00**
- SET No. 6.—(4 Wheels)—Same as Set. No. 4, only built for heavy surreys, with rims for 3-in. pneumatic tires. Per set **26 00**
- NICKELING Hubs, Spokes and Nipples, \$1.00 per set, net, additional. Write us for prices on special wheels, giving description.

SPECIAL PRICES QUOTED FITTED WITH PNEUMATIC TIRES.

Sulky Wheels and Attachments.

BALL BEARING.

Wood Rims, Hubs and 12/14 double swaged spokes, nickel. Material and workmanship of the best quality in every respect. 28-in. diameter.

PRICE, Wheels only. Per pair	\$7 50
" Attachments. Per set	7 50
" Tires	7 50

Note.—For price of either Wire or Wood Wheels with Cushion Tires, and Crescent or Square Base Rims



STEEL WHEELS WITH HUBS COMPLETE. STEEL CHANNEL RIMS AND SOLID RUBBER TIRES.

- 28 or 30 inch wheels with forty 10x12 nicked spokes and ¾ inch solid Kokomo Tires **\$35 00**
- 28 or 30 inch wheels with 5x11 nicked spokes and ¾ inch solid Kokomo Tires **40 00**
- 28 or 30 inch wheels with 8x10 nicked spokes and 1 inch solid Kokomo Tires **45 00**
- 28 or 30 inch wheels with 6x8 nicked spokes and 1¼ inch solid Kokomo Tires **52 00**
- 28 or 30 inch wheels with 6x8 nicked spokes and 1¼ inch solid Kokomo Tires **65 00**



WRITE FOR PRICES.

If you want Cushion Tires in sizes 1½ and 1¾ inch, we can make the rims special and substitute for either of the Tires mentioned above. Special prices on application.

Midgely Tubular Steel Wheels.

FOR SOLID OR PNEUMATIC TIRES.

Price, per set of any size 28 to 36 in., for either 1½ in. solid or 2½ in. pneumatic tires, including cups, cones, caps and balls. **\$60 00**

The wheels are supplied with a filler coat, rubbed down and ready for enameling, but not enameled. Extra for enameling 3 coats and striping, \$5 per set net.

For size rims to take 1½ inch solid or 3 inch pneumatic **65 00**

We will supply these Wheels with any of our gear jobs, and quote difference of price on application, or we will supply them with American Roller Bearings, instead of ball bearing, as described above, at an extra figure.



No. 00 Barrett Automobile Jack.

The Barrett Automobile Jack is designed, constructed and proportioned especially for automobile purposes. It is built on the lines of the larger size "Barrett Jacks," and has the same working principle. It has a lifting capacity of **One Ton**, and in its construction nothing but the best grade of materials and highest quality of workmanship are employed. Its height, length of raise and curved top are designed to meet automobile requirements, and it is light in weight and easily carried and operated. The foot-lift enables this Jack to grapple low set loads with the greatest facility. The operation is simple and the load is raised on both upward and downward stroke of the lever. The load is lowered in the same manner by simply turning the eccentric (or thumbscrew) at the side. This is the only Jack of its kind with a lowering appliance, and it will operate at any angle. It is quicker, safer, more positive and durable and hence more efficient than any Jack on the market. The Barrett Automobile Jack is indispensable and should form part of the equipment of every Automobile and Automobile barn. The dimensions are as follows:

Capacity in Tons.	Height, Bar Down, Inches.	Rate of Bar, Inches.	Height, Bar Raised, Inches.	Size of Bar, Inches.	Weight, Pounds.	Code Word.	List Price.	Discount
1	12	6	18	1½x16	8½	Auto	\$8 00	

OTHER STYLE JACKS ARE QUOTED ELSEWHERE

Midgely Wheel, Showing Brake Pulley Attached to Rear Wheel Hub.



AXLE END AND KNUCKLE.

Style C.

Nos. 1S and 2S Style, Knuckles, Axle Ends and Hubs.

All Fitted as Shown.

Knuckles are drop forged,
Steel Hubs and Ball Races,
Accurately Ground.

Price per pair, ball bearing..... \$16 00
Price per pair, roller bearing..... 36 00
Nickeling hubs and knuckles..... 2 50

For wood wheels with boxes
complete deduct \$2 00.



For Straight, Round Tubular Axle and
Wire Wheels.

Price, per pair, ball bearing..... \$18 00
Price, per pair, roller bearing..... 40 00
Nickeling hubs and knuckles..... 2 50



For Straight, Round Tubular
Axle and Wood Wheels.

Price, per pair, ball bearing..... \$17 00
Price, per pair, roller bearing..... 38 00
Nickeling hubs and knuckles..... 2 50

EXTRA HEAVY FORCINGS.

For Rigs 2000 lbs. or Over.



Style D Axle End.

	1 1/4	1 3/8	1 1/2	1 3/4	1 7/8
Each	\$5 00	\$5 00	\$6 75	\$6 75	\$6 75

Above prices are net.



Style E Axle End.

Same price as Style D.

No extra charge for Spring Support.



This Knuckle Style D or E Axle Ends.

STEERING KNUCKLE.

Sizes.

	1 1/4 and 1 3/8	1 1/2 and 1 3/4	1 7/8
Length of Post	4 3/4	4 3/4	4 3/4
Diameter of Post	2 1/4	2 1/2	2 1/2
" " Collar	2 1/4	2 1/2	2 1/2
Length of Arm	30 1/2	30 1/2	30 1/2
Diameter of Arm	1 9/16	1 3/8	1 3/8

PRICES STEERING KNUCKLE.

	1 1/4	1 3/8	1 1/2	1 3/4	1 7/8
Each	\$6 00	\$6 00	\$7 35	\$7 35	\$7 35

Above prices are net.

HUBS FOR AUTOMOBILE, CARRIAGE AND SULKY.

Size over all 5 1/2 inches. Flanges, C. to C., 4 1/2 inches. Diameter of flange 3 1/4 inches. Heavy cast steel, either all ball bearing or rears keyed. Price, four hubs, shells rough, per set..... \$4 00
Price, four hubs, shells machined and including caps, cups, cones and balls, per set..... 10 00
Price, four hubs, shells nicked as above, per set..... 13 00

We have the same general style Hub, suitable for Carriages or light weight Automobiles. Price as follows:

Machined, including caps, cups, cones and balls, per set..... 9 00
Same as above, but nicked, per set..... 11 00



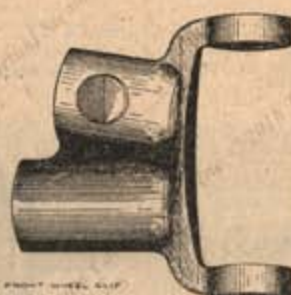
A-Style.



B-Style.

A. Designed for 1 1/4 or 1 3/4 in. tubing.
B. Designed for tubular or square axle.
C. For heavy solid square axle.

Price, for vehicles to	Each, \$1 50
600 lbs	1 65
1,000 "	1 75
1,500 "	1 75
Machining only	Each Piece, 3 00

LIGHT WEIGHT YOKE AND KNUCKLE.

Suitable for Loco Pattern Yoke, used on
tubular gears.

Yoke for Loco Pattern,
tubular gear. Will carry
1,000 lbs.

Price, rough..... \$1 50
" machined..... 3 00

Price, rough..... \$1 50
" machined..... 3 00

SULKY HUBS.

Price, per pair..... \$4 00

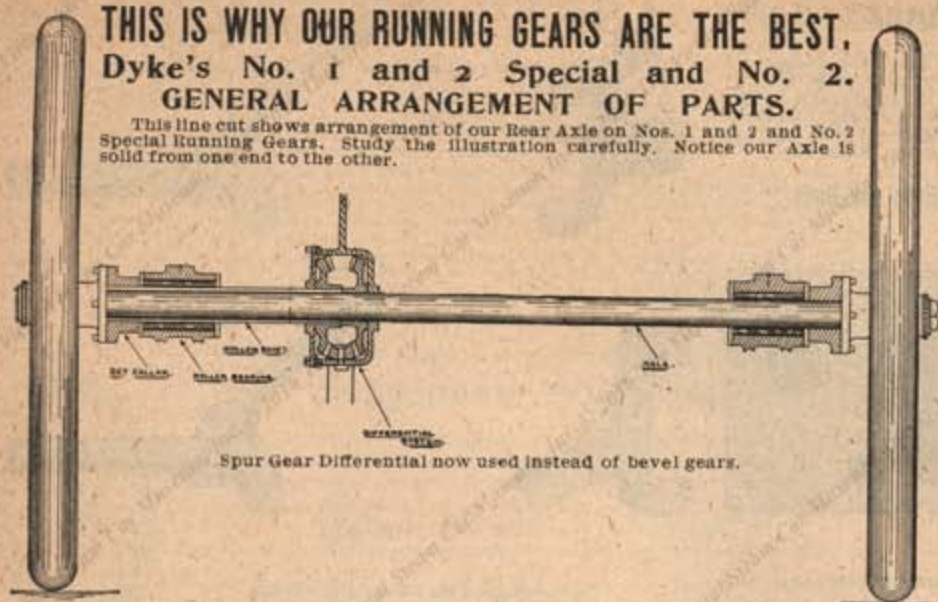
These Hubs are accurately made from high grade stock, and have attained a first-class reputation.



Wire Wheel Hubs in the Rough or Machined.

THIS IS WHY OUR RUNNING GEARS ARE THE BEST. Dyke's No. 1 and 2 Special and No. 2. GENERAL ARRANGEMENT OF PARTS.

This line cut shows arrangement of our Rear Axle on Nos. 1 and 2 and No. 2 Special Running Gears. Study the illustration carefully. Notice our Axle is solid from one end to the other.



Spur Gear Differential now used instead of bevel gears.



HEAVY STEERING DEVICE FOR SOLID AXLES.

Drop forged yoke ends and knuckles, with spindles machined for wood or wire wheels and welded to any track.

Price, 1 1/2 inch, Round or Square	\$20 00
Price, 1 3/4 inch, Round or Square	22 00
Price, 1 1/2 inch, Round or Square	24 00

Above Axles are fitted with either one or two spring blocks, as ordered. If reach connections are wanted, add \$4.00 list.



MEDIUM STEERING DEVICE FOR TUBULAR AXLES.

Price, per pair, machined, as shown... \$19 00
Price, per pair, with 12-gauge tubing, brazed and filed... 22 00
We will supply this finished device any tread wanted at same price.

Price, per pair, for frame connections for front axle to connect reach rods, brazed on axle and filed, any distance between centers... \$4 00
Price, per pair, not brazed on and fittings in the rough... 2 00



This Set for 1 1/2-inch Axle.

DYKE'S Roller Bearings and Cases Nos. 1 and 2 Gears.

Bearings and Cases.

The Roller Bearings are placed inside of the Steel Cases. The Bearings roll on the Axle and on the Hollow Shaft. For a 1 1/2-inch Axle the Rollers are on one side, inside diameter, 1 1/2-inch, and on the Hollow Shaft side they are 2 inches. For 1 3/4 inch Axle on one side is 1 3/4 inches, the other 2 1/4 inches inside diameter. The cases, however, are the same outside dimensions. The Cases are of steel and have lugs cast to receive the springs, also, receptacle for reaches, making a flexible connection. Dust Caps are placed on each side to retain rollers and keep out the dust. Ells are also screwed in for oiling.

Price on Bearings and Cases.

No. 1. Pair Cases and Rollers, complete for 1 1/2 inch Axle and Hollow Shaft. Per pair	\$15 00
No. 2. Pair Cases and Rollers, complete for 1 3/4 inch Axle and Hollow Shaft. Per Pair	16 00

These Bearings and Cases will be sold separately as follows, inside dimensions given:

No. 1—1 1/2 inches inside diameter, with Case complete. Each	\$4 25	No. 1—2 inches inside diameter, with Case complete. Each	8 25
No. 2—1 3/4 inches inside diameter, with Case complete. Each	8 25	No. 2—2 1/4 inches inside diameter, with Case complete. Each	8 25
1 pr Plain Bronze Bearings for 1 1/2, 1 3/4 or 1 5/16 Axle with Spring Blocks to take 1 1/4 inch wide Spring. Per pair, \$12 00. Castings of these plain Bearings			\$5 00

PRICE ON REAR AXLES.

With spur differential, boxes, spring blocks and reach lugs in combination, or with boxes and spring blocks without reach lugs.

Price, 1 1/2 in. Axle, Model 6 Differential, 3/4 in. Balls	\$55 00
Price, 1 5/16 in. Axle, Model 1 Differential, 7/16 in. Balls	65 00
Price, 1 1/2 in. Axle, Model 1 Differential, 1/2 in. Balls	68 00
Price, 1 5/16 in. Axle, Model 1 Differential, Roller Bearings	100 00
Price, 1 1/2 in. Axle, Model 1 Differential, Roller Bearings	110 00
Price, 1 3/4 in. Axle, Model 2 Differential, Roller Bearings	130 00
Price, 2 in. Axle, Model 2 Differential, Roller Bearings	160 00

These Axles are made of the finest quality solid steel, spindles are key-seated for either wood or wire wheels.

Size Axles on Different Type Gears.

No. 0 Running Gear has 1 5/16 inch Axle (Rear).	
No. 1 Running Gear has 1 1/2 inch Axle. "	
No. 2 Running Gear has 1 3/4 inch Axle. "	

Size Hollow Shaft.

No. 0 uses on one side hollow shaft 1 1/4 in. Diam.	
No. 1 uses on one side hollow shaft 2 in. Diam.	
No. 2 uses on one side hollow shaft 2 1/4 in. Diam.	

Channel Rims for Solid Rubber Tires.

28 to 36 in.	3/8 in.	Per Set of 4.
" "	1 "	\$4 80
" "	1 1/4 "	5 00
" "	1 1/2 "	5 50
" "	1 3/4 "	6 10
" "	2 "	8 00
" "	2 1/4 "	10 00

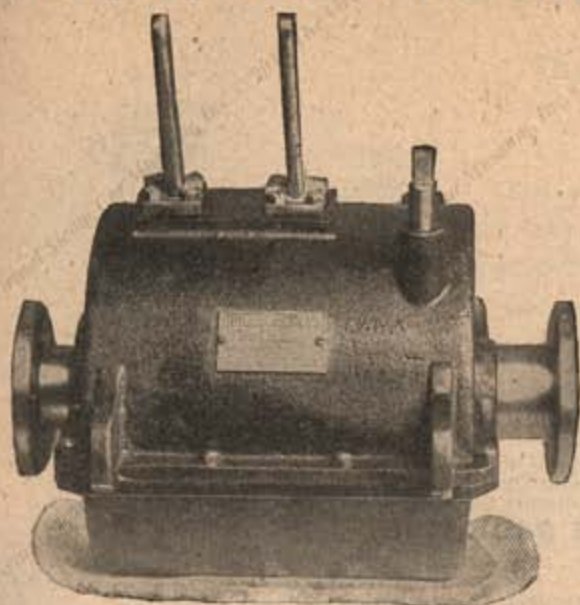
Our
Roller
Bearings
and Cases
are Sold
Separately.

See List Below.



This Set for 1 3/4 inch Axle.

This is the Upton Special Encased Transmission Gear.

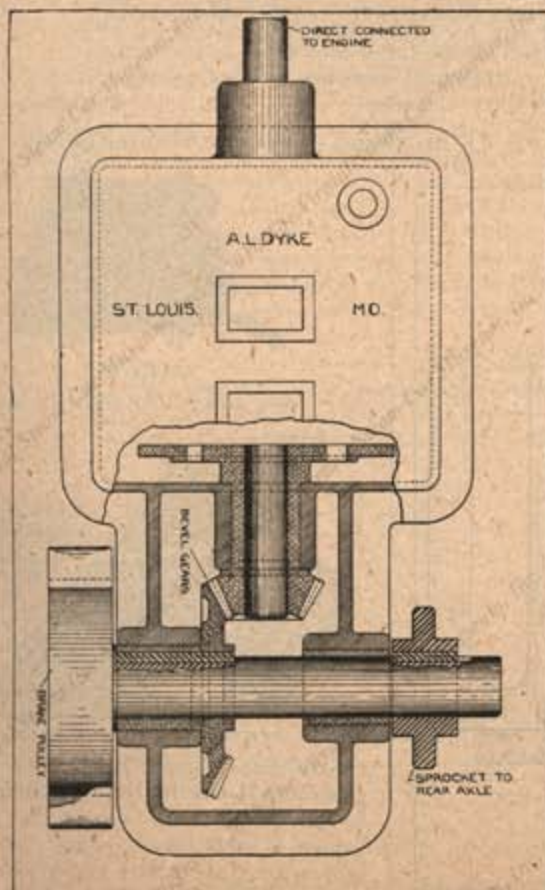


You want good results from your transmission gear whether you know or care how it is made or works. Shifting gears cannot be made durable and repairs mean delays as well as dollars. In the Upton transmission the gears are always in mesh; do not shift and when on high speed all gears are idle.

This new gear can be used any way you desire—coupled direct to motor or as an intermediate when using a chain drive. Or it can be used to transmit in a direct line using a bevel gear drive. In this case universal joints are, of course, necessary.

No. 1—4 H. P. \$85.00
No. 2—8 H. P. 100.00
No. 3—12 H. P. 120.00
No. 4—16 H. P. 150.00

We now supply the above encased transmission.

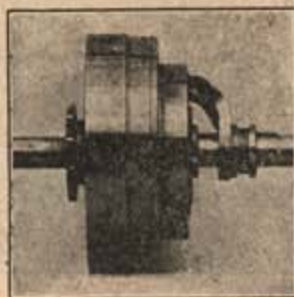


Transmission used on Dyke's 6-H. P. Tonneau and No. 2A Outfit. Change Gears and Bevel Gears encased, running in oil.

THE CHAMPION SPEED CHANGING CLUTCH.

FOR AUTOMOBILES.

Self Contained and Attached Direct to Engine Shaft.



(Patent Applied For..)

In offering this clutch to manufacturers of automobiles we beg to state that we are not offering an experiment but an article that after hard usage has proved itself perfect and beyond criticism in any respect.

We believe that this clutch will greatly add to the sale of a gasoline wagon, as it will do away with the noise which is caused by gears running idle when the wagon is at high speed. It is also very compact, thus leaving more room in the body of the wagon.

DESCRIPTION.

Contains Two Speeds Forward and One Reverse.

The slow speed is produced by tightening a brake band on the outer rim, allowing the wagon to move at any desired speed up to six miles per hour.

The reverse is produced by tightening a second brake band on the outer rim.

The high speed is produced by throwing in the finger which binds the entire clutch to the engine shaft, causing it to rotate with it.

Can be made with any size sprocket, from eight-tooth up, and bored to fit any size shaft.

The gears are enclosed in a dust-proof case, measuring 9 1/4 inches in diameter by 7 1/4 inches on the shaft, including finger and sprocket, and run in oil.

Has no gears running idle when the wagon is on high speed.

All gears are spur gears cut from the solid piece and are always in mesh.

Contains nothing to get out of order.

GUARANTEE.

These clutches are made of the best of material and are guaranteed against any defects in material or workmanship.

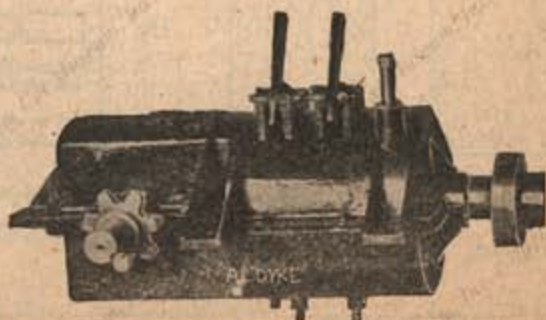
We will replace any part which shows a defect within one year from date of purchase providing the defective part is returned to us at our factory, charges prepaid.

Price..... \$85.00.

DYKE'S No. 1A TRANSMISSION.

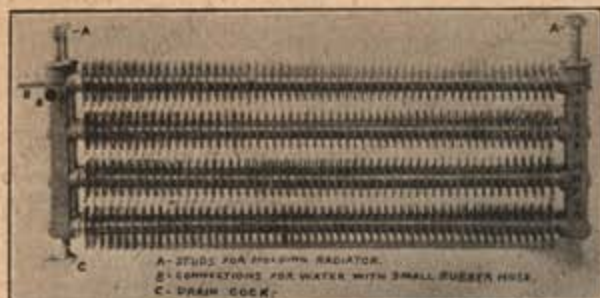
Made especially for vertical type engines where the engine is placed in front. The change gears all run in oil and are encased together with the bevel gears. The transmission is direct connected with the engine shaft. A brake pulley is supplied, also sprocket. No. 1A is suitable for a 4 to 6 h. p. Weight, 115 lbs.; length over all, 18 inches; width, 9 1/4 inches. No. 2A for engines 6 to 12 h. p.

No. 1A, Price, complete..... \$150.00
No. 2A, " "..... 175.00



View showing Style of No. 1A and No. 2A Transmission.

DYKE'S RADIATING OUTFITS AND PARTS.



A—STUDS FOR 5-H.P. RADIATOR.
B—CONNECTIONS FOR WATER WITH SMALL RUBBER HOSE.
C—DRAIN COCK.

STYLE A.

DIMENSIONS—Length, 26 inches over all. Height, 7 1/4 inches.

Extreme Width, End View, 4 1/4 inches.

The above illustration shows our standard size Radiator made up complete. This Radiator consists of eight tubes with dimensions given above. We make these Radiators with either brass or copper discs. We recommend copper discs. The tubing is 1/2 inch inside and 5/8 inch outside copper tubing. The End Plates are made of brass. We provide these Radiators with Studs for hanging, as shown in illustration, and with Drip Cocks (not shown) in bottom to drain the water.

This Single Radiator is sufficient to cool a 5-H.-P. engine by using Dyke's Circulating Pump to circulate the water. To cool a 10-H.-P. Engine simply connect two of the single Radiators together, making a 16 tube outfit.

PRICE OF COMPLETE RADIATOR.

SINGLE RADIATOR, complete, with Brass Headers, Copper Discs, and Copper Tubing, complete with Studs for hanging with Drain Cocks **\$35 00**
DOUBLE RADIATOR, consisting of two Single Radiators connected together, and both purchased at one time **55 00**
 If Brass Discs and Brass Tubing are used deduct \$2.00 for each Single Radiator. We can connect any number together desired. Price on application.



SQUARE
PATTERN



ROUND
PATTERN



SECTION

A. L. DYKE

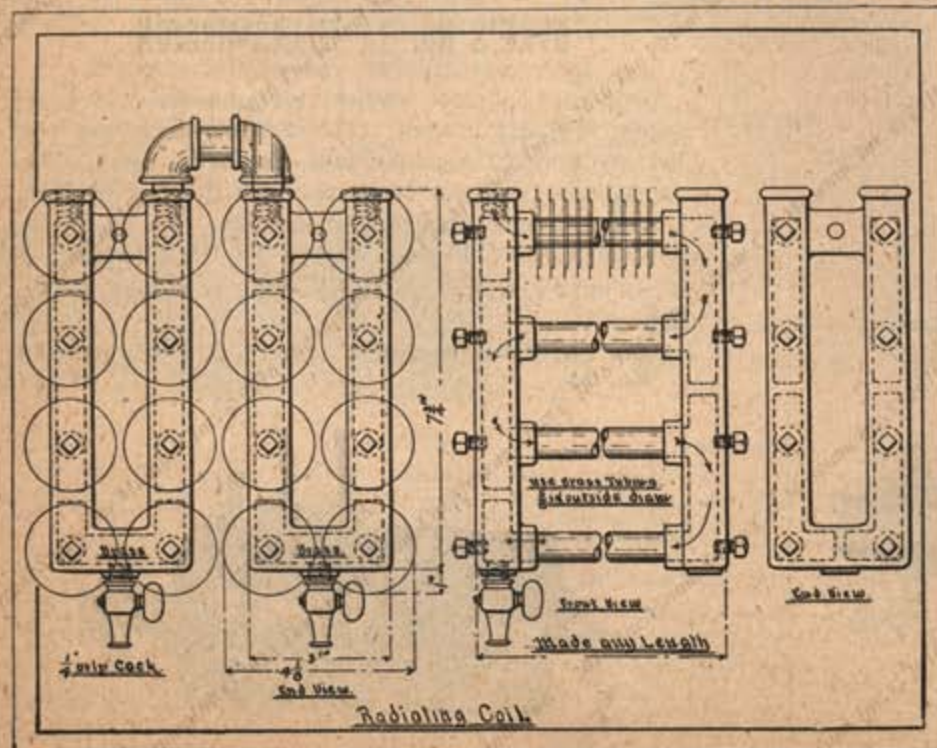
RADIATING DISCS.

Discs 2-inch diameter, 1/2-inch hole. 4 Discs placed on tubing take up 1 inch space.

PRICES ON DISCS, Etc., SEPARATELY.

Copper Discs	per 1000	\$ 9 00
Bronze Discs	"	8 00
Brass Discs	"	7 00
Seamless Copper Tubing, 1/2 inch outside diameter, cut to length	per foot	18
Brazed Brass Tubing, 1/2 inch outside diameter, cut to length	"	10
Brass Header Castings, two required for each section, \$2.50 each	per section	5 00
Brass Elbows, for 1/2-inch Pipe	each	18
Brass Short Nipples, for 1/2-inch Pipe	"	20
Brass Plugs, for 1/2-inch Pipe	"	05
Brass Drip Cocks, for 1/2-inch Pipe	"	25
Machine Headings, complete, including the Castings	per pair	10 00

We can also supply these discs for 3/4 in. Tubing; also only 1 1/2 in. round or square at same price.



SHOWING TWO RADIATING COILS CONNECTED TOGETHER.



STYLE B.

We also make other style Radiators.



DYKE STYLE C RADIATOR.

Star Shape, Copper Tubes, with Wood Core. All the water is in thin sheets in the points of the star—none in the center of the tubes. Five tubes, 24 inches long, are sufficient for four horse power engine. List Price, \$12.50

We recommend style A for best results.

DYKE FLOAT FEED CARBURETTER

The First Float Feed Carburetter placed on the American Market.

The only satisfactory and complete Carburetter. Your engine equipped with this device can be throttled as effectively as a steam engine. No extra fittings. Complete with throttle lever, "C." Even has a spring tension for this lever.

Insist on having this device on your gasoline engine. It gives your engine more power.

You will get better results from this Carburetter than any Vaporizer or Carburetter made.

ADVANTAGES.

RELIABLE. POWERFUL. SIMPLE. Will not back fire after once being adjusted, it is controlled entirely with lever "C." Can be used with any kind or grade of gasoline. Suitable for any style of Gasoline Engine from 4 to 40 horse-power. Easily attached, no extra valves or fittings necessary. Give us the size of your inlet valve pipe and we will thread the connection "G" accordingly. It has a lever "C" for attaching to foot or lever pedal for giving various speeds. It has its own spring tension "E" for bringing lever back to slow speed when released. Also has an adjustment which allows engine to run as slow as desired when rig is standing ("Air Adj"). After once being regulated it is entirely automatic. No choking. No odor. No smoke. You can depend upon it under the severest conditions. Nothing to work loose. Will work satisfactorily in any climate.

THE ACTION OF THIS CARBURETTER IS AS FOLLOWS:

When the valve on gasoline tank is opened, the gasoline flows to B (Fig. 1), and passes through a gauze strainer and fills chamber No. 1 (Fig. 1) to a point approximately as indicated (Fig. 2). The buoyancy of the float presses the spindle it carries into the small hole above it, preventing the further admission of gasoline to the carburetter. This is one of its most valuable features, rendering it very economical and safe.

When the engine is started a vacuum is formed in the space surrounding the air valve, and the gasoline is drawn in and instantly atomized and mixed with the air which is drawn in at the same time.

The amount of gasoline vaporized is always exactly in proportion to the demand made upon it by the engine. There is absolutely no waste. The rate of flow of gasoline to secure a proper mixture is adjusted by the knuckled head screw D (Fig. 1), and when once properly adjusted is clamped by the small lock screw directly under it.

The screw named "air adj." (Fig. 2) is placed at such a point that, when against the stop F (Fig. 1) the engine just continues its motion.

It can instantly be brought to full speed by pressing a foot button which is placed at the driver's foot. This button is connected with lever C (Fig. 1) by means of a rod or wire. When this lever C is opened it swings the air valve around in line with the passage marked "to the engine or G," allowing a full charge to enter.

When the foot button is released, the spring E (Fig. 1) closes or brings lever C back to stop F (Fig. 1) thereby closing the air valve, and the engine drops to its lowest speed.

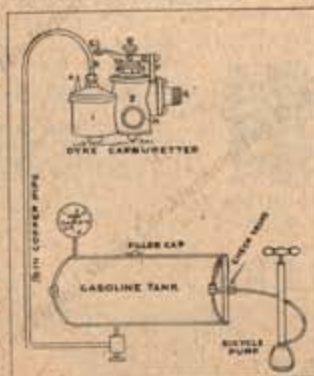
When starting, especially in cold weather, the flusher "A" should be pressed for a couple of seconds before turning the crank. This allows a small amount of gasoline to escape into the air chamber, and furnishes the first charge.

The operation is entirely automatic.

The Carburetter is made of brass or aluminoid, nicely finished and all adjusted ready for attaching. It will last indefinitely.

Plan for using Dyke's Carburetter when placed above the level of the Gasoline Tank.

Two pounds of air pumped into the gasoline tank will raise the gasoline to Carburetter, 1 foot. Four pounds will raise it 2 feet.

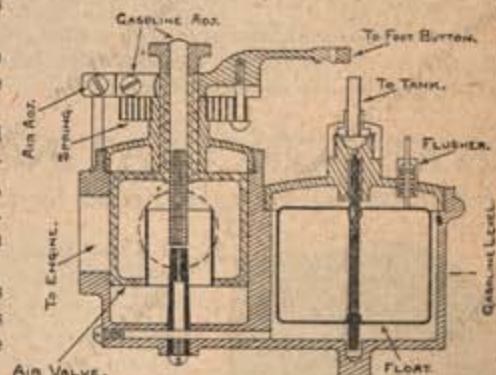


If you desire these Carburetters made of Aluminoid add \$2.50.

After once attaching this Carburetter and adjusting same, all that is necessary is to start your engine and operate lever "C" for various speeds. Full directions with each Carburetter. We make these Carburetters in two sizes and of Brass or Aluminoid.

No. 2—Made of brass, weight 5½ pounds, suitable for engines from 4 to 12 horse-power, with any size pipe connection, "G," ½ to 1¼-inch pipe, thread any size..... \$15 00

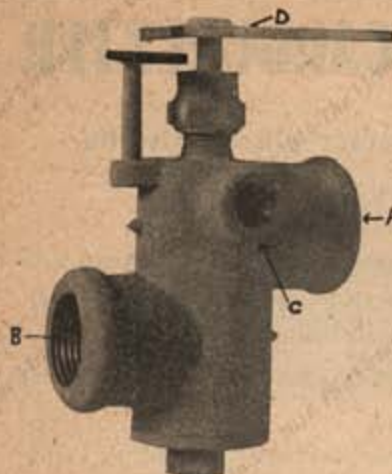
No. 3—Made of brass, weight 9¾ pounds, suitable for engines from 12 to 40 horse-power, with any size pipe connection, "G," 1 to 2-inch pipe, thread any size..... 25 00



DYKE'S FLOAT TYPE CARBURETOR.

G 2—Sectional View. Cut about ½ actual size.

These Carburetters ordinarily require the gasoline tank to be just barely above the Carburetter. When you desire your gasoline tank below the level of Carburetter, follow diagram shown above.



DYKE'S MIXING VALVE.

For Stationary and Marine Engines or Auto Engines, where the speed is not constantly being changed.

Designed especially for engines which run at a uniform speed.

We particularly desire to call your attention to the Dyke Mixing Valve. For some time the Dyke Float

Feed Carburettor has been on the market. This Carburettor is a very fine piece of mechanism, and has advantages over all other forms of Mixers and Vaporizers. It is just a little too high priced, however, for some of our customers, and in order to satisfy the wants of all, we offer you the above Mixer. This device is made in several sizes, and works just a little better than any other Mixer on the market. We recommend our Float Feed Carburettor, however, if you wish to get the best satisfaction.

This Mixing Valve gives good satisfaction for Boat and Stationary Engines, where the speed is not constantly being varied.

PRICE—Size (No. 1) from 1 to 4 horse-power..... \$3 50 net
Size (No. 3) from 8 to 20 horse-power..... 9 00 net

In ordering, please give the stroke and bore of your engine. Size No. 1 is used on No. 0 Engine, if for stationary purpose.

Description of Mixer.—C, gasoline connection; A, air connection (left open); B, connects with your inlet valve on engine; D, gasoline needle valve.

DYKE'S CIRCULATING PUMP.

IS THE BEST AND CHEAPEST PUMP ON THE MARKET.



This Pipe connection is **SOLID** and not divided into half.

Dimensions—Diameter, 5 inches; Weight, 5 pounds; diameter shaft, $\frac{1}{2}$ inch; total length of shaft from side, 3 inches; extreme width, not including shaft, $3\frac{1}{4}$ inches; pipe connections for $\frac{1}{2}$ -inch pipe.

This Pump is used for circulating the water around the cylinder of a gasoline engine. Requires hardly any power to operate. No attention needed. Connected to engine shaft or to counter shaft by small sprocket and chain. Connected to tank by rubber hose.

PRICES.

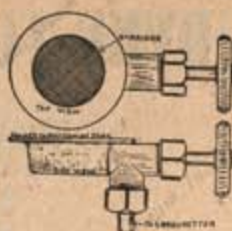
Brass throughout, no iron used in its construction..... \$6 75
Cast Iron shell, with brass dash-wheel and brass shaft..... 6 00
10-tooth Sprocket for engine shaft bored $\frac{1}{2}$ to $1\frac{1}{4}$ inches..... 50
10 tooth Sprockets to go on pump shaft for $1\frac{1}{4}$ chain, each..... 50
 $1\frac{1}{4}$ Chain, per foot..... 25



Sectional view of the muffler showing the internal structure.

DYKE'S MUFFLERS.

Although we have never pushed the sale of our Mufflers we have been making them for several years, and we now have what we believe to be the simplest and best Muffler on the market. We make these Mufflers for any size gasoline engine. When desired we can attach a valve to Muffler, so that by opening this valve you can cut your Muffler out and let it exhaust in the open air. This is an advantage sometimes in racing or where more power is needed. Our standard sizes are as follows:



Dyke's Gasoline Needle Valve.

With Ground Joint Union Strainer.

Designed to be soldered to bottom of gasoline tank.

BRASS.

Price, each..... \$2.50

THE LOBEE PUMP

Increases and gives a positive circulation to the cooling water for all Gasoline Motors. Simple, Cheap, Durable, Efficient, easy to apply.

CAPACITY.

Revolutions	gals. per minute.
50	$\frac{1}{4}$
100	$\frac{1}{2}$
200	1
300	$1\frac{1}{2}$
400	2
500	$2\frac{1}{2}$

Can safely be run at speed of 1500 revolutions.

LIST PRICES.

Bronze, each..... \$10 00
Cast Iron, each..... 7 00

Prices do not include pulley.



WEBER MUFFLER.

in. Pipe	Price
1	\$10 00
1 1/2	13 00
2	16 00
2 1/2	20 00

THE CHRISTMAN SILENT MUFFLER.

Patent Applied for.

When the right size is used it removes all of the noise of the exhaust, and is in fact a **SILENT MUFFLER**.

Has two air chambers, connected by a new system of pipes, which allows the gases to expand gradually, and finally pass to the open air in a continuous stream. Suitable for either single or multiple cylinder engines.



For Engine of	Outside Dimensions.	Net Price.
2 to 4 Horse Power	5 x 28 inches	\$15 00
4 to 8 "	5 1/2 x 32 "	20 00
8 to 12 "	6 x 38 "	27 50
12 to 20 "	8 x 36 "	35 00

Lukenheimer Generator Valves.

FOR GASOLINE ENGINES.

Pipe connection:	Price each.
$\frac{1}{2}$ inch	\$2 00
$\frac{3}{4}$ "	3 30
1 "	4 00
1 1/4 "	4 50

ANGLE OR VERTICAL PATTERN.

Pipe connection.	Price each, list.
$\frac{1}{2}$ inch	\$6 00
2 "	7 50
2 1/2 "	12 50
3 "	18 00

Size of Generator Valve for any Cylinder up to 14 in. Diameter.

Diam. Cylinder.	Pipe connection.
2 inch	$\frac{1}{2}$ inch
3 1/2 "	$\frac{3}{4}$ "
4 1/2 "	1 "
5 1/2 "	1 1/4 "
7 "	1 1/2 "

Diam. Cylinder.	Pipe connection.
8 inch	2 inch
10 "	2 1/2 "
12 "	3 "
14 "	3 1/2 "



Vertical pattern.



Angular pattern.

The above proportions are based on a piston travel of not more than 600 feet per minute. For higher speeds than this, the generator valve should be the next size larger than shown above.

In ordering be sure to specify which pattern is required. Orders which do not specify any particular pattern will be filled with angle generator valves, as that pattern is most generally used.

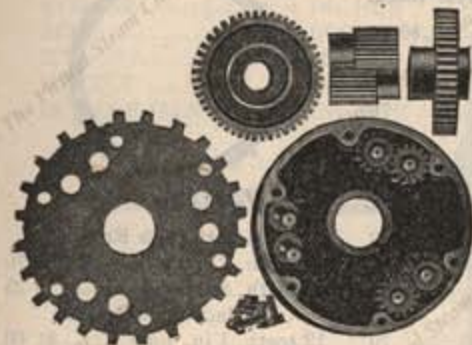
	For 2 & 4 H.P.	For 5 & 6 H.P.	For 7 & 8 H.P. Double.	For 10 & 12 H.P. Double.
Size	No. 0	No. 1	No. 2	No. 3
Size Pipe Connection	$\frac{1}{2}$ or 1 in.	1 1/4 in.	1 1/2 in.	2 in.
Price	\$4.50	\$7.00	\$10.00	\$12.50

Larger sizes made to order.

Brown-Lipe Spur Equalizing Gears.

THE spur gear construction adopted by the Brown-Lipe Gear Co. avoids all of the faulty features of bevel compensating gears, viz.: side thrust, tendency to spread the axle, wear on thrust collars, no looseness to continually adjust, no loss of power. It produces the strongest and most durable device for the purpose, and the Brown-Lipe Equalizing Gear is one less part of an automobile to require attention.

This cut illustrates models 1, 2 and 6, the only difference being in size, capacity and price. They are all enclosed in a dust-proof, oil tight case. They will carry a quart or more of oil, and lubricate themselves for a long time.

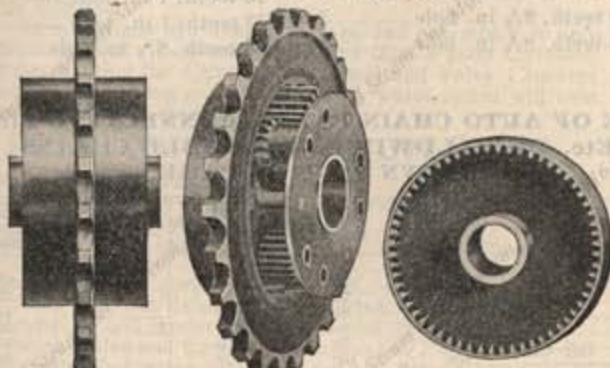


Illustrating Models 1, 2 and 6.

Model 3. List Price, \$25.

For automobiles of less than 2500 lbs. and 8 to 12 horse power.

Dust proof case. Width, 2 1/4 inches; hubs project 1/2 inch each side.
Sprockets, 21 teeth or more. Brake surface, 1 1/4 inch.
Diameter of drum, 8 inches. Sprockets in center or on side as desired.
Receives axle, 3/8 inch to 1 1/2 inch



Model 4.

Model 4. List Price, \$35.

For heavy vehicles; strongest equalizing gear made.

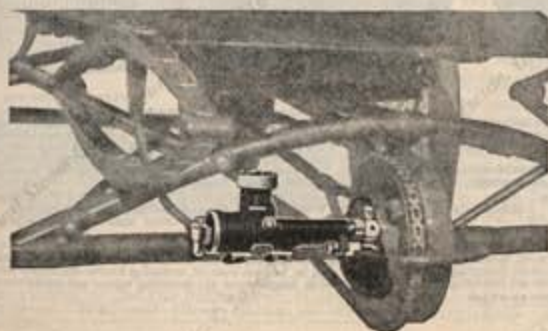
Consists of a pair of internal gears, 8 pitch teeth, 1 inch face, accurately cut, and six pinions. The pinions are carried on studs riveted to check pieces which are fastened to bosses on the central web that holds the sprocket. The internal gears form the sides and brake surfaces, permitting two brakes of 1 1/4 inch width, with sprocket in the middle. The brake is applied through the internal gears directly to the axle, and not through the pinions. Diameter of drum, 8 inches; width, 4 inches; hubs projecting 1/2 inch each side. Receives axle from 1 1/2 inches to 2 inches. Sprockets according to specifications.

Standard size Model 4 is 24 teeth, 1 1/2 x 3/4 roller.

Model 5. List Price, \$18.

For motor tricycles of 3 horse power or less.

Driving gear, 100 spur teeth, 16 p., 4 inch face. Width, 15-18 inch; hubs project 1/2 inch each side. Designed to be built into case forming part of frame construction. Stock size subject to modification. Weight, 6 1/2 lbs.



Showing Reason Pump attached to rear axle of a steam auto.

Model 1. List Price, \$25.

For automobiles of less than 2,500 lbs. and 5 to 10 horse power.

Sprockets 24 to 36 inch teeth. Width 2 1/4 inches; hubs project 1/2 inch each side.
Diameter of drum, 7 inches. Band brake surface, 2 1/4 inches.
Receives axle, 3/8 inch to 1 1/4 inch.

Standard sizes are: 24 teeth, 1 1/2 x 2 roller chain; 24 teeth, 1 1/2 x 3/4 roller.

Model 2. List Price, \$26.

For automobiles of less than 2500 lbs. and 5 to 10 horse power.

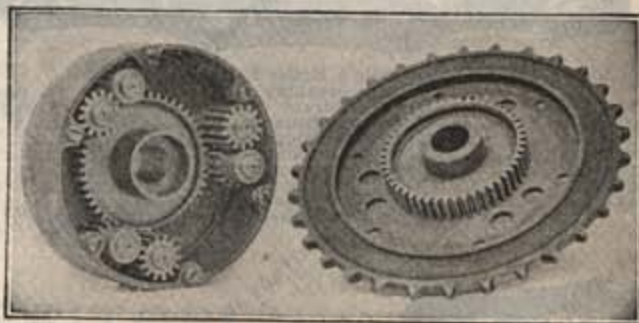
Sprockets 24 to 36 inch teeth. Band brake surface, 2 1/4 inches.
Diameter of drum, 5 1/2 inches. Receives axle from 3/8 inch to 1 1/2 inch.
Width, 2 1/4 inches; hubs project 1/2 inch each side.

Model 6. List Price, \$18.

For light vehicles and tricycles of 2 to 4 horse power.

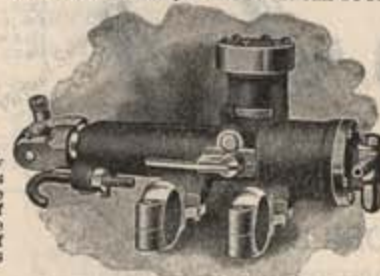
Sprockets 18 to 36 inch teeth. Band brake surface, 1 1/2 inch.
Diameter of drum, 4 1/2 inches. Receives axle, from 3/8 inch to 1 inch.
Width, 2 1/4 inches; hubs project 5-15 inch each side.

Standard sizes, 30 tooth, 1 x 3/4 block.



Illustrating Construction of Models 1, 2 and 6.

THE "REASON" AUTOMATIC AIR PUMP is entirely automatic in its operation. It can be set by a simple adjustment to automatically lock and unlock on any predetermined pressures from 5 to 80 lbs., as desired by the operator, the variation between the locking and unlocking can be regulated at from 5 to 20 lbs. thus maintaining a reliable uniform pressure between the two points of adjustment.



Different conditions of automobiling demand different air pressure. This adjustable feature solves the bower problem to perfection. The capacity of the pump is from 40 to 60 lbs. of air in from 3 to 5 minutes, the pump being in operation only a small portion of the time the vehicle is running to keep up the desired pressure.

The new model pump is attached to the rear axle of the vehicle with clips as shown in cut, and by a simple device accurately adjusted and firmly secured to the axle yoke around the compensating gear, and is operated by a cam disc, the face of which is bolted to the sprocket, which makes a suitable cover for the compensating gear.

It can be easily and securely fastened to any vehicle in a few minutes, and is absolutely positive in its operation, and requires no attention whatever except occasional oiling, all wearing parts being properly protected from dirt or dust. A simple auxiliary device is provided whereby the pump can be stopped and started from the seat if desired. This pump can also be used to inflate the tires when necessary. The pump weighs about 7 lbs., is neat, compact, and occupies but a small space upon the vehicle, and is a model of perfection in workmanship and material, insuring durability as well as efficiency. All parts are made in duplicate and are interchangeable.

The new model pump has been given a most thorough and practical test upon a steam vehicle for the past six months, and it has proven to be thoroughly practical and reliable in every particular, and is guaranteed to give entire satisfaction.

The adoption of this pump means a positive saving of fuel, uniform steam pressure, convenience and comfort to the driver. Each pump is carefully tested before leaving the factory. It is not an expensive luxury but a necessity you cannot afford to be without.

See that your vehicle is equipped with the NEW MODEL REASON AUTOMATIC AIR PUMP. List price, complete, \$25.00.

PATENTED: August 20, 1900; Nov. 15, 1901. England—May 16, 1900. Canada—September 31, 1901. OTHER PATENTS PENDING.

NOTE.—1 5-16x1/2 Block used on Oldsmobiles.

1x5-16 Block Chain used on old models of Locomobiles and Mobiles.

1x5-16 Roller Chain together with 40 and 50 tooth sprockets, will interchange with old models where 1x5-16 block chains are used, making the old models the same size sprockets and chains as new models, thereby giving more strength and durability.

BALDWIN CHAINS.

DETACHABLE.



Baldwin's Block Pattern.

Size.	Breaking Strain.	Price Per Foot.
1 x 5/16	2,500 Pounds	\$0 50
1 x 3/8	2,500 Pounds	55
1 x 1/2	2,500 Pounds	65
1 5/16x1/2	4,500 Pounds	1 25
1 1/2x3/4	5,200 Pounds	1 85
1 3/4x1	9,000 Pounds	1 70



Baldwin's Roller Pattern.

Size.	Breaking Strain.	Price Per Foot.
3/4x1/16	4,500 Pounds	\$1 00
15/16x3/16	4,500 Pounds	1 25
1x1/8	5,000 Pounds	1 25
1x1/4	5,000 Pounds	1 85
1 1/4x1/2	5,500 Pounds	1 85
1 1/2x3/4	15,300 Pounds	1 85

Above Roller Chain can be furnished in riveted style on order.

AUTOMOBILE SPROCKETS.

PRICES ON SPROCKETS NET.

Block Pattern.

1 Inch Pitch, 3/8 Inch Wide Block.

8 teeth, 1 in. hole	\$0 50
10 teeth, 2 1/4 in. hole	55
12 teeth, 2 1/4 in. hole	60
15 teeth, 2 1/4 in. hole	70
30 teeth, 8 1/8 in. hole	2 70
36 teeth, 8 1/8 in. hole	30 0

1 Inch Pitch, 1/2 Inch Wide Block.

7 teeth, 3/4 in. hole	\$0 50
8 teeth, 1 in. hole	55
10 teeth, 2 1/4 in. hole	60
12 teeth, 2 1/4 in. hole	65
15 teeth, 2 1/4 in. hole	70
30 teeth, 8 1/8 in. hole	2 80
36 teeth, 8 1/8 in. hole	3 00

1 Inch Pitch, 5/8 Inch Wide Block.

8 teeth, 1 in. hole	\$0 65
10 teeth, 2 1/4 in. hole	75
12 teeth, 2 1/4 in. hole	\$0 80
30 teeth, 8 1/8 in. hole	3 60
36 teeth, 8 1/8 in. hole	4 00



Roller Pattern.

3/4 Inch Pitch Roller.

15 teeth, 2 1/4 in. hole	\$0 70
40 teeth, 8 1/8 in. hole	3 25

1 1/2 Inch Pitch Roller.

12 teeth, 1 in. hole	\$1 00
32 teeth, 8 1/8 in. hole	3 50

1 1/4 Inch Pitch Roller.

10 teeth, 1 in. hole	\$1 25
12 teeth, 1 in. hole	1 70
30 teeth, 8 1/8 in. hole	6 00

1 1/2 Inch Pitch Roller.

10 teeth, 1 in. hole	\$1 95
12 teeth, 1 in. hole	2 60
30 teeth, 8 1/8 in. hole	7 75

PRICE OF AUTO CHAIN PARTS, CONNECTING LINKS, Etc., OF BALDWIN DETACHABLE CHAINS SHOWN ON THIS PAGE.

Size of Chain.	Blocks, Each.	Pins, Each.	Side Plates, Each.	Rollers, Each.	Connecting Links, Each.
Block.					
1x5-16	5c	5c	5c		10c
1x3/8	5c	5c	5c		10c
1x1/2	7c	6c	8c		15c
1 5-16x1/2	10c	5c	5c		20c
1 1/2x3/4	15c	7c	7c		25c
1 3/4x1	20c	10c	10c		30c
Roller.					
3/4x5-16		6c	15c	10c	20c
1 5-16x3/8		10c	15c	15c	25c
1x3/8		10c	15c	15c	25c
1x1/2		10c	15c	15c	25c
1 1/4x1/2		15c	20c	20c	30c
1 1/2x3/4		20c	20c	25c	35c



SPECIAL AUTOMOBILE SPRINGS.

These Springs we have made to our special order. The regular spring obtainable on the market being unsuitable for the special work for which these are adapted. All our springs are oil tempered and polished ready for enameling.

SPECIAL AUTO SPRINGS.

8x4 leaf x 1 1/4 in.	each, \$2 00	34x4 leaf x 1 1/4 in.	each, \$2 50
36x4 " 1 1/4 in.	" 2 25	36x5 " 1 1/2 in.	" 3 50
36x5 " 1 1/2 in.	" 3 00		

SPECIAL AUTOMOBILE BALLS.

Size.	Price per 100.	Size.	Price per 100.
3/16	\$0 50	5/16	\$0 60
1/2	50	3/4	70
7/16	50	1	1 70
1 1/8	60	1 1/4	4 00

We carry in stock all sizes up to 1 in. Special prices on application.

SALAMANDRINE BOILER.

ABSOLUTELY NON-EXPLOSIVE.

CAN'T BURN OUT.

QUICK STEAMER.



PATENT APPLIED FOR.
A boiler that will not burn out.
A boiler that is absolutely non-explosive.
A boiler that needs little or no repairs.
A boiler that will give 10 pounds of steam from cold water in one minute and five seconds.
A boiler that will give 210 pounds of steam from cold water in two minutes and fifteen seconds.
EVERY Steam Automobile
EVERY Express Wagon
EVERY Delivery Wagon
EVERY Steam Yacht
EVERY House
6 H. P. boiler is 18 in. diam. over all, including outside covering.
10 H. P. boiler is 24 in. diam. over all, including outside covering.
15 H. P. boiler is 31 in. diam. over all, including outside covering.
List Price, 6 H. P. complete as above \$160.00
" 10 H. P. " " " 225.00
" 15 H. P. " " " 335.00

A boiler that will make steam so fast that you never have to stop to make steam no matter how steep the grade.
The best and most economical boiler that can be made.
We give you a written guarantee for all of the above.
Our boiler can be supplied with the new water feed regulator, absolutely reliable, obviating watching the water glass, for \$10 extra. Patent applied for.

With our boiler we supply without extra charge, which other manufacturers do not:
A Pilot Light.
A Burner.
Smoke Stack Head and Outside Covering.
20 1/2 in. height over all, including burner and smoke stack head.
20 1/2 in. height over all, including burner and smoke stack head.
44 in. height over all, including burner and smoke stack head.

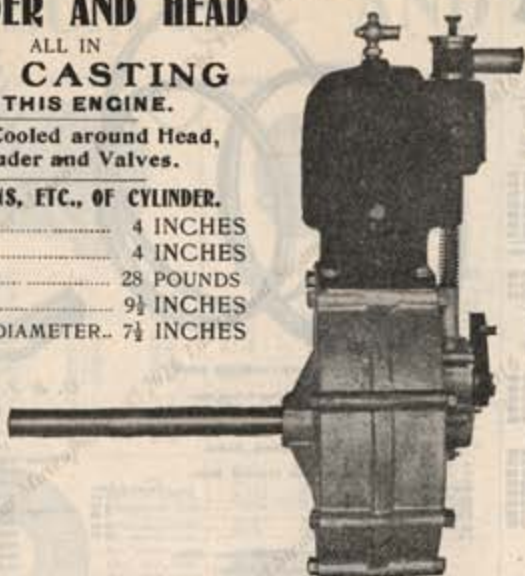
WE SELL ALONE, IF PREFERRED, THE CYLINDER AND HEAD

ALL IN
ONE CASTING
OF THIS ENGINE.

Water Cooled around Head,
Cylinder and Valves.

DIMENSIONS, ETC., OF CYLINDER.

STROKE 4 INCHES
BORE 4 INCHES
WEIGHT 28 POUNDS
HEIGHT 9½ INCHES
EXTREME DIAMETER.. 7½ INCHES



DYKE'S 3½-H.P. No. 0 GASOLINE ENGINE.

As we have had such a demand for the cylinder alone of this engine, both in the rough and machined, we have decided to list the Cylinder alone. A number of customers have purchased the Cylinders and made Double, Triple and Quadruple Engines.

This Cylinder is a distinctive type and one which is very difficult to cast. It is more expensive than a plain Cylinder, but the fact that the Cylinder and Head and Valve Chamber are all in one casting and all thoroughly water cooled will over rate the difference in cost.

PRICE No. 0 3½-H.-P. CYLINDER.

Price of Cylinder in the rough alone	\$10 00
Price of Cylinder in rough, with Inlet Valve, Piston, and Ring Casting	12 00
Price of Bronze Connecting Rod, 9¾ inches from center to center	2 00
Price of Cylinder complete, machined, with Piston, fitted Inlet and Exhaust Valves fitted, water and exhaust and igniter plug holes and relief cock holes drilled and tapped, less Connecting Rod	20 00
Connecting Rod, extra, and machined and fitted with Wrist Pin	5 00

INVENTION AND IMPROVEMENT INDUCE PROGRESS.

CUT No. 1. FLEXIBLE TUBING.



CUT No. 2. SHOWS CONSTRUCTION.



CUT No. 3. SHOWS COUPLING.

FLEXIBLE METALLIC TUBING

A Tubing that is absolutely guaranteed Not to Leak when used for High Pressures (100 to 2000 pounds), Steam, Compressed Air, water, Oil, Ammonia, etc.

Especially adapted to Automobile, Railroad and Steamboat uses, Electric Wire and Cable Armoring Work, etc.

**SERVICE AND DURABILITY
EFFECT ECONOMY.**

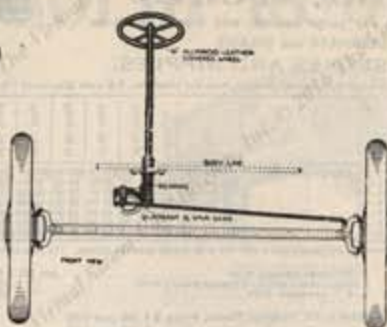
FLEXIBLE METALLIC TUBING

Is made in all sizes from 5-16 inch up, in both Copper and Steel. Being metallic, it is unaffected by the action of Petroleum, or other Oils, Salts, Spirits, etc.

No rubber or canvas being used, it is not affected by climatic variations. Will not Char, Kink or Crush. Practically Indestructible.

All connections are made of best quality Metal and attached to the outside of the tubing, thus preserving the full internal area of the Tube. All Sizes in Stock.

DYKE'S WHEEL STEERING DEVICE.



WOOD WHEEL.

With Brass Ribs, as used on Dyke's Wheel Steering Device.

Price Wood Wheel alone \$2 00
Price Wood Wheel with spider fitted 7 00
Diameter of Wheels, 12, 15 and 18 inches.

WITH WOOD WHEEL.

Undoubtedly the best device made. It can be attached to any style vehicle with very little trouble. We supply you with the complete outfit:

Wheel of Aluminum or Wood.

Steering Rod of Steel, with joint to throw over out of the way.

Bearing or Support which holds the Rod.

Quadrant or Bronze with cut teeth.

Spur Gear on end of this Steering Rod works into teeth of Quadrant.

We also supply the Fork in Quadrant to take the rod which goes over to Steering Knuckle.

Price, complete, all assembled, ready to attach, with wood wheel, nickel plated spider, 13 or 15 inch diameter \$18 00

ADOPTION OF MERITORIOUS DEVICES

TENDS TOWARD PERFECTION.

LIST PRICES, FLEXIBLE METALLIC TUBING IN COPPER AND STEEL. FOR ALL USES AND PURPOSES.

COPPER No. 2, UP TO 250 POUNDS PRESSURE (STEAM).

Internal Diam.	Price per Foot	Working Pressure	Prices of Couplings of Connections
5-16	\$ 75	250	\$ 90 \$ 1 00
¾	1 25	250	1 00 1 15
1	1 50	250	1 20 1 35
1 ¼	1 80	250	1 50 1 50
1 ½	2 05	250	1 90 1 85
2	2 65	250	2 30 2 25
2 ½	3 20	250	2 75 2 70
3	4 25	200	3 25 3 30
3 ½	5 25	200	3 95 3 90
4	6 75	175	4 50 7 20
4 ½	7 90	175	5 95 8 85
5	9 00	150	
5 ½	10 15	150	
6	12 10	Suction	Special Quotations on Larger Sizes
6 ½	13 75	Suction	
7	15 60	Suction	

DUPLEX COPPER FOR 350 POUNDS PRESSURE

Size	Price per Foot	Size	Price per Foot
5-16	\$2 50	¾	\$3 40
¾	2 90	1	6 10
1	3 50	1 ¼	7 20
1 ¼	4 50	1 ½	9 00

GALVANIZED STEEL No. 2

For All Purposes Except Steam Use. Hydraulic, Pneumatic Work, Oil, Petroleum, Ammonia, Salts, Spirits, etc.

Internal Diam.	Price per Foot	Diam. Circle	Prices of Couplings of Connections
5-16	\$ 40	8 in.	\$ 90 \$ 1 00
¾	43 9	"	1 00 1 55
1	55 10	"	1 20 1 35
1 ¼	75 11	"	1 50 1 50
1 ½	85 12	"	1 90 1 85
2	95 15	"	2 30 2 25
2 ½	1 50 19	"	2 75 2 70
3	1 70 24	"	3 25 3 30
3 ½	2 25 28	"	3 95 3 90
4	3 30 31	"	4 50 7 20
4 ½	3 55 34	"	5 90 8 85
5	4 15 41	"	
5 ½	4 50 50	"	Special Quotations on larger Sizes
6	5 40 60	"	
6 ½	6 50 72	"	
7	8 05 84	"	

No. 1 STEEL. FOR GAS, SPEAKING TUBES, ETC.

Internal Diam.	Price per Foot	Push-on Couplings	Hexagon Wing-Caps
¾	\$ 15	15	\$.30
1	20	20	.35
1 ¼	25	25	.40
1 ½	30	30	.45
2	35	35	.50
2 ½	40	40	.55

All Sizes Flange Connections Special Quotations.
THESE PRICES ARE NET

PNEUMATIC AND SOLID RUBBER TIRES.

Goodrich Single Tube Motor Tires.



Size	Low Price	Each	Low Price	Each
28 x 3	\$15.00	\$5.00	\$20.00	\$6.66
30 x 3	15.00	5.00	20.00	6.66
32 x 3	17.00	5.66	22.00	7.33
34 x 3	19.00	6.33	24.00	8.00
36 x 3	21.00	7.00	26.00	8.66
38 x 3	23.00	7.66	28.00	9.33
40 x 3	25.00	8.33	30.00	10.00
42 x 3	27.00	9.00	32.00	10.66
44 x 3	29.00	9.66	34.00	11.33
46 x 3	31.00	10.33	36.00	12.00
48 x 3	33.00	11.00	38.00	12.66
50 x 3	35.00	11.66	40.00	13.33
52 x 3	37.00	12.33	42.00	14.00
54 x 3	39.00	13.00	44.00	14.66
56 x 3	41.00	13.66	46.00	15.33
58 x 3	43.00	14.33	48.00	16.00
60 x 3	45.00	15.00	50.00	16.66
62 x 3	47.00	15.66	52.00	17.33
64 x 3	49.00	16.33	54.00	18.00
66 x 3	51.00	17.00	56.00	18.66
68 x 3	53.00	17.66	58.00	19.33
70 x 3	55.00	18.33	60.00	20.00
72 x 3	57.00	19.00	62.00	20.66
74 x 3	59.00	19.66	64.00	21.33
76 x 3	61.00	20.33	66.00	22.00
78 x 3	63.00	21.00	68.00	22.66
80 x 3	65.00	21.66	70.00	23.33
82 x 3	67.00	22.33	72.00	24.00
84 x 3	69.00	23.00	74.00	24.66
86 x 3	71.00	23.66	76.00	25.33
88 x 3	73.00	24.33	78.00	26.00
90 x 3	75.00	25.00	80.00	26.66
92 x 3	77.00	25.66	82.00	27.33
94 x 3	79.00	26.33	84.00	28.00
96 x 3	81.00	27.00	86.00	28.66
98 x 3	83.00	27.66	88.00	29.33
100 x 3	85.00	28.33	90.00	30.00

Goodrich Single Tube Carriage Tires.



Goodrich Tires are Guaranteed Perfect.

Size	Low Price	Each	Low Price	Each
28 x 3	\$15.00	\$5.00	\$20.00	\$6.66
30 x 3	15.00	5.00	20.00	6.66
32 x 3	17.00	5.66	22.00	7.33
34 x 3	19.00	6.33	24.00	8.00
36 x 3	21.00	7.00	26.00	8.66
38 x 3	23.00	7.66	28.00	9.33
40 x 3	25.00	8.33	30.00	10.00
42 x 3	27.00	9.00	32.00	10.66
44 x 3	29.00	9.66	34.00	11.33
46 x 3	31.00	10.33	36.00	12.00
48 x 3	33.00	11.00	38.00	12.66
50 x 3	35.00	11.66	40.00	13.33
52 x 3	37.00	12.33	42.00	14.00
54 x 3	39.00	13.00	44.00	14.66
56 x 3	41.00	13.66	46.00	15.33
58 x 3	43.00	14.33	48.00	16.00
60 x 3	45.00	15.00	50.00	16.66
62 x 3	47.00	15.66	52.00	17.33
64 x 3	49.00	16.33	54.00	18.00
66 x 3	51.00	17.00	56.00	18.66
68 x 3	53.00	17.66	58.00	19.33
70 x 3	55.00	18.33	60.00	20.00
72 x 3	57.00	19.00	62.00	20.66
74 x 3	59.00	19.66	64.00	21.33
76 x 3	61.00	20.33	66.00	22.00
78 x 3	63.00	21.00	68.00	22.66
80 x 3	65.00	21.66	70.00	23.33
82 x 3	67.00	22.33	72.00	24.00
84 x 3	69.00	23.00	74.00	24.66
86 x 3	71.00	23.66	76.00	25.33
88 x 3	73.00	24.33	78.00	26.00
90 x 3	75.00	25.00	80.00	26.66
92 x 3	77.00	25.66	82.00	27.33
94 x 3	79.00	26.33	84.00	28.00
96 x 3	81.00	27.00	86.00	28.66
98 x 3	83.00	27.66	88.00	29.33
100 x 3	85.00	28.33	90.00	30.00

The Goodrich Single Tube Heavy Traction Tires.

Size	Low Price	Each	Low Price	Each
28 x 3	\$15.00	\$5.00	\$20.00	\$6.66
30 x 3	15.00	5.00	20.00	6.66
32 x 3	17.00	5.66	22.00	7.33
34 x 3	19.00	6.33	24.00	8.00
36 x 3	21.00	7.00	26.00	8.66
38 x 3	23.00	7.66	28.00	9.33
40 x 3	25.00	8.33	30.00	10.00
42 x 3	27.00	9.00	32.00	10.66
44 x 3	29.00	9.66	34.00	11.33
46 x 3	31.00	10.33	36.00	12.00
48 x 3	33.00	11.00	38.00	12.66
50 x 3	35.00	11.66	40.00	13.33
52 x 3	37.00	12.33	42.00	14.00
54 x 3	39.00	13.00	44.00	14.66
56 x 3	41.00	13.66	46.00	15.33
58 x 3	43.00	14.33	48.00	16.00
60 x 3	45.00	15.00	50.00	16.66
62 x 3	47.00	15.66	52.00	17.33
64 x 3	49.00	16.33	54.00	18.00
66 x 3	51.00	17.00	56.00	18.66
68 x 3	53.00	17.66	58.00	19.33
70 x 3	55.00	18.33	60.00	20.00
72 x 3	57.00	19.00	62.00	20.66
74 x 3	59.00	19.66	64.00	21.33
76 x 3	61.00	20.33	66.00	22.00
78 x 3	63.00	21.00	68.00	22.66
80 x 3	65.00	21.66	70.00	23.33
82 x 3	67.00	22.33	72.00	24.00
84 x 3	69.00	23.00	74.00	24.66
86 x 3	71.00	23.66	76.00	25.33
88 x 3	73.00	24.33	78.00	26.00
90 x 3	75.00	25.00	80.00	26.66
92 x 3	77.00	25.66	82.00	27.33
94 x 3	79.00	26.33	84.00	28.00
96 x 3	81.00	27.00	86.00	28.66
98 x 3	83.00	27.66	88.00	29.33
100 x 3	85.00	28.33	90.00	30.00

Goodrich Clincher Vehicle Tires, Motor Weight.

Prices will be quoted according to size and weight of machine to be used on. The tire will be made accordingly and guaranteed.

U. S. has automobile Clincher Tires to suit the frame of any car. Clincher Tires to suit the frame of any car. Clincher Tires to suit the frame of any car.



Size	Low Price	Each	Low Price	Each
28 x 3	\$15.00	\$5.00	\$20.00	\$6.66
30 x 3	15.00	5.00	20.00	6.66
32 x 3	17.00	5.66	22.00	7.33
34 x 3	19.00	6.33	24.00	8.00
36 x 3	21.00	7.00	26.00	8.66
38 x 3	23.00	7.66	28.00	9.33
40 x 3	25.00	8.33	30.00	10.00
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60 x 3	45.00	15.00	50.00	16.66
62 x 3	47.00	15.66	52.00	17.33
64 x 3	49.00	16.33	54.00	18.00
66 x 3	51.00	17.00	56.00	18.66
68 x 3	53.00	17.66	58.00	19.33
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44 x 3	29.00	9.66	34.00	11.33
46 x 3	31.00	10.33	36.00	12.00
48 x 3	33.00	11.00	38.00	12.66
50 x 3	35.00	11.66	40.00	13.33
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54 x 3	39.00	13.00	44.00	14.66
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62 x 3	47.00	15.66	52.00	17.33
64 x 3	49.00	16.33	54.00	18.00
66 x 3	51.00	17.00	56.00	18.66
68 x 3	53.00	17.66	58.00	19.33
70 x 3	55.00	18.33	60.00	20.00
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96 x 3	81.00	27.00	86.00	28.66
98 x 3	83.00	27.66	88.00	29.33
100 x 3	85.00	28.33	90.00	30.00

Group A Inches	Group B Inches	Group C Inches	Group D Inches
17 1/2	21 1/2	25 1/2	29 1/2
21 1/2	25 1/2	29 1/2	33 1/2
25 1/2	29 1/2	33 1/2	37 1/2
29 1/2	33 1/2	37 1/2	41 1/2
33 1/2	37 1/2	41 1/2	45 1/2
37 1/2	41 1/2	45 1/2	49 1/2
41 1/2	45 1/2	49 1/2	53 1/2
45 1/2	49 1/2	53 1/2	57 1/2
49 1/2	53 1/2	57 1/2	61 1/2
53 1/2	57 1/2	61 1/2	65 1/2
57 1/2	61 1/2	65 1/2	69 1/2
61 1/2	65 1/2	69 1/2	73 1/2
65 1/2	69 1/2	73 1/2	77 1/2
69 1/2	73 1/2	77 1/2	81 1/2
73 1/2	77 1/2	81 1/2	85 1/2
77 1/2	81 1/2	85 1/2	89 1/2
81 1/2	85 1/2	89 1/2	93 1/2
85 1/2	89 1/2	93 1/2	97 1/2
89 1/2	93 1/2	97 1/2	101 1/2
93 1/2	97 1/2	101 1/2	105 1/2
97 1/2	101 1/2	105 1/2	109 1/2
101 1/2	105 1/2	109 1/2	113 1/2
105 1/2	109 1/2	113 1/2	117 1/2
109 1/2	113 1/2	117 1/2	121 1/2
113 1/2	117 1/2	121 1/2	125 1/2
117 1/2	121 1/2	125 1/2	129 1/2
121 1/2	125 1/2	129 1/2	133 1/2
125 1/2	129 1/2	133 1/2	137 1/2
129 1/2	133 1/2	137 1/2	141 1/2
133 1/2	137 1/2	141 1/2	145 1/2
137 1/2	141 1/2	145 1/2	149 1/2
141 1/2	145 1/2	149 1/2	153 1/2
145 1/2	149 1/2	153 1/2	157 1/2
149 1/2	153 1/2	157 1/2	161 1/2
153 1/2	157 1/2	161 1/2	165 1/2
157 1/2	161 1/2	165 1/2	169 1/2
161 1/2	165 1/2	169 1/2	173 1/2
165 1/2	169 1/2	173 1/2	177 1/2
169 1/2	173 1/2	177 1/2	181 1/2
173 1/2	177 1/2	181 1/2	185 1/2
177 1/2	181 1/2	185 1/2	189 1/2
181 1/2	185 1/2	189 1/2	193 1/2
185 1/2	189 1/2	193 1/2	197 1/2
189 1/2	193 1/2	197 1/2	201 1/2
193 1/2	197 1/2	201 1/2	205 1/2
197 1/2	201 1/2	205 1/2	209 1/2
201 1/2	205 1/2	209 1/2	213 1/2
205 1/2	209 1/2	213 1/2	217 1/2
209 1/2	213 1/2	217 1/2	221 1/2
213 1/2	217 1/2	221 1/2	225 1/2
217 1/2	221 1/2	225 1/2	229 1/2
221 1/2	225 1/2	229 1/2	233 1/2
225 1/2	229 1/2	233 1/2	237 1/2
229 1/2	233 1/2	237 1/2	241 1/2
233 1/2	237 1/2	241 1/2	245 1/2
237 1/2	241 1/2	245 1/2	249 1/2
241 1/2	245 1/2	249 1/2	253 1/2
245 1/2	249 1/2	253 1/2	257 1/2
249 1/2	253 1/2	257 1/2	261 1/2
253 1/2	257 1/2	261 1/2	265 1/2
257 1/2	261 1/2	265 1/2	269 1/2
261 1/2	265 1/2	269 1/2	273 1/2
265 1/2	269 1/2	273 1/2	277 1/2
269 1/2	273 1/2	277 1/2	281 1/2
273 1/2	277 1/2	281 1/2	285 1/2
277 1/2	281 1/2	285 1/2	289 1/2
281 1/2	285 1/2	289 1/2	293 1/2
285 1/2	289 1/2	293 1/2	297 1/2
289 1/2	293 1/2	297 1/2	301 1/2
293 1/2	297 1/2	301 1/2	305 1/2
297 1/2	301 1/2	305 1/2	309 1/2
301 1/2	305 1/2	309 1/2	313 1/2
305 1/2	309 1/2	313 1/2	317 1/2
309 1/2	313 1/2	317 1/2	321 1/2
313 1/2	317 1/2	321 1/2	325 1/2
317 1/2	321 1/2	325 1/2	329 1/2
321 1/2	325 1/2	329 1/2	333 1/2
325 1/2	329 1/2	333 1/2	337 1/2
329 1/2	333 1/2	337 1/2	341 1/2
333 1/2	337 1/2	341 1/2	345 1/2
337 1/2	341 1/2	345 1/2	349 1/2
341 1/2	345 1/2	349 1/2	353 1/2
345 1/2	349 1/2	353 1/2	357 1/2
349 1/2	353 1/2	357 1/2	361 1/2
353 1/2	357 1/2	361 1/2	365 1/2
357 1/2	361 1/2	365 1/2	369 1/2
361 1/2	365 1/2	369 1/2	373 1/2
365 1/2	369 1/2	373 1/2	377 1/2
369 1/2	373 1/2	377 1/2	381 1/2
373 1/2	377 1/2	381 1/2	385 1/2
377 1/2	381 1/2	385 1/2	389 1/2
381 1/2	385 1/2	389 1/2	393 1/2
385 1/2	389 1/2	393 1/2	397 1/2
389 1/2	393 1/2	397 1/2	401 1/2
393 1/2	397 1/2	401 1/2	405 1/2
397 1/2	401 1/2	405 1/2	409 1/2
401 1/2	405 1/2	409 1/2	413 1/2
405 1/2	409 1/2	413 1/2	417 1/2
409 1/2	413 1/2	417 1/2	421 1/2
413 1/2	417 1/2	421 1/2	425 1/2
417 1/2	421 1/2	425 1/2	429 1/2
421 1/2	425 1/2	429 1/2	433 1/2
425 1/2	429 1/2	433 1/2	437 1/2
429 1/2	433 1/2	437 1/2	441 1/2
433 1/2	437 1/2	441 1/2	445 1/2
437 1/2	441 1/2	445 1/2	449 1/2
441 1/2	445 1/2	449 1/2	453 1/2
445 1/2	449 1/2	453 1/2	457 1/2
449 1/2	453 1/2	457 1/2	461 1/2
453 1/2	457 1/2	461 1/2	465 1/2
457 1/2	461 1/2	465 1/2	469 1/2
461 1/2	465 1/2	469 1/2	473 1/2
465 1/2	469 1/2	473 1/2	477 1/2
469 1/2	473 1/2	477 1/2	481 1/2
473 1/2	477 1/2	481 1/2	485 1/2
477 1/2	481 1/2	485 1/2	489 1/2
481 1/2	485 1/2	489 1/2	493 1/2
485 1/2	489 1/2	493 1/2	497 1/2
489 1/2	493 1/2	497 1/2	501 1/2
493 1/2	497 1/2	501 1/2	505 1/2
497 1/2	501 1/2	505 1/2	509 1/2
501 1/2	505 1/2	509 1/2	513 1/2
505 1/2	509 1/2	513 1/2	517 1/2
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513 1/2	517 1/2	521 1/2	525 1/2
517 1/2	521 1/2	525 1/2	529 1/2
521 1/2	525 1/2	529 1/2	533 1/2
525 1/2	529 1/2	533 1/2	537 1/2
529 1/2	533 1/2	537 1/2	541 1/2
533 1/2	537 1/2	541 1/2	545 1/2
537 1/2	541 1/2	545 1/2	549 1/2
541 1/2	545 1/2	549 1/2	553 1/2
545 1/2	549 1/2	553 1/2	557 1/2
549 1/2	553 1/2	557 1/2	561 1/2
553 1/2	557 1/2	561 1/2	565 1/2
557 1/2	561 1/2	565 1/2	569 1/2
561 1/2	565 1/2	569 1/2	573 1/2
565 1/2	569 1/2	573 1/2	577 1/2
569 1/2	573 1/2	577 1/2	581 1/2
573 1/2	577 1/2	581 1/2	585 1/2
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589 1/2	593 1/2	597 1/2	601 1/2
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601 1/2	605 1/2	609 1/2	613 1/2
605 1/2	609 1/2	613 1/2	617 1/2
609 1/2	613 1/2	617 1/2	621 1/2
613 1/2	617 1/2	621 1/2	625 1/2
617 1/2	621 1/2	625 1/2	629 1/2
621 1/2	625 1/2	629 1/2	633 1/2
625 1/2	629 1/2	633 1/2	637 1/2
629 1/2	633 1/2	637 1/2	641 1/2
633 1/2	637 1/2	641 1/2	645 1/2
637 1/2	641 1/2	645 1/2	649 1/2
641 1/2	645 1/2	649 1/2	653 1/2
645 1/2	649 1/2	653 1/2	657 1/2
649 1/2	653 1/2	657 1/2	661 1/2
653 1/2	657 1/2	661 1/2	665 1/2
657 1/2	661 1/2	665 1/2	669 1/2
661 1/2	665 1/2	669 1/2	673 1/2
665 1/2	669 1/2	673 1/2	677 1/2
669 1/2	673 1/2	677 1/2	681 1/2
673 1/2	677 1/2	681 1/2	685 1/2
677 1/2	681 1/2	685 1/2	689 1/2
681 1/2	685 1/2	689 1/2	693 1/2
685 1/2	689 1/2	693 1/2	697 1/2
689 1/2	693 1/2	697 1/2	701 1/2
693 1/2	697 1/2	701 1/2	705 1/2
697 1/2	701 1/2	705 1/2	709 1/2
701 1/2	705 1/2	709 1/2	713 1/2
705 1/2	709 1/2	713 1/2	717 1/2
709 1/2	713 1/2	717 1/2	721 1/2
713 1/2	717 1/2	721 1/2	725 1/2
717 1/2	721 1/2	725 1/2	729 1/2
721 1/2	725 1/2	729 1/2	733 1/2
725 1/2	729 1/2	733 1/2	737 1/2
729 1/2	733 1/2	737 1/2	741 1/2
733 1/2	737 1/2	741 1/2	745 1/2
737 1/2	741 1/2	745 1/2	749 1/2
741 1/2	745 1/2	749 1/2	753 1/2
745 1/2	749 1/2	753 1/2	757 1/2
749 1/2	753 1/2	757 1/2	761 1/2
753 1/2	757 1/2	761 1/2	765 1/2
757 1/2	761 1/2	765 1/2	769 1/2
761 1/2	765 1/2	769 1/2	773 1/2
765 1/2	769 1/2	773 1/2	777 1/2
769 1/2	773 1/2	777 1/2	781 1/2
773 1/2	777 1/2	781 1/2	785 1/2
777 1/2	781 1/2	785 1/2	789 1/2
781 1/2	785 1/2	789 1/2	793 1/2
785 1/2	789 1/2	793 1/2	797 1/2
789 1/2	793 1/2	797 1/2	801 1/2
793 1/2	797 1/2	801 1/2	805 1/2
797 1/2	801 1/2	805 1/2	809 1/2
801 1/2	805 1/2	809 1/2	813 1/2
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809 1/2	813 1/2	817 1/2	821 1/2
813 1/2	817 1/2	821 1/2	825 1/2
817 1/2	821 1/2	825 1/2	829 1/2
821 1/2	825 1/2	829 1/2	833 1/2
825 1/2	829 1/2	833 1/2	837 1/2
829 1/2	833 1/2	837 1/2	841 1/2
833 1/2	837 1/2	841 1/2	845 1/2
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841 1/2	845 1/2	849 1/2	853 1/2
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853 1/2	857 1/2	861 1/2	865 1/2
857 1/2	861 1/2	865 1/2	869 1/2
861 1/2	865 1/2	869 1/2	873 1/2
865 1/2	869 1/2	873 1/2	877 1/2
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885 1/2	889 1/2	893 1/2	897 1/2
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937 1/2	941 1/2	945 1/2	949 1/2
941 1/2	945 1/2	949 1/2	953 1/2
945 1/2	949 1/2	953 1/2	957 1/2
949 1/2	953 1/2	957 1/2	961 1/2
953 1/2	957 1/2	961 1/2	965 1/2
957 1/2	961 1/2	965 1/2	969 1/2
961 1/2	965 1/2	969 1/2	973 1/2
965 1/2	969 1/2	973 1/2	977 1/2
969 1/2	973 1/2	977 1/2</	

DROP FORGINGS

of finest quality for Automobiles, etc.

VALVE STEM FORGINGS

DEVELOPMENT



For Gas Engines, etc. Dimensions show sizes of unfinished forgings. List prices are changed; ignore all previous lists. PLEASE ORDER WHEN ORDERED.

CRANK SHAFTS.



Unfinished and Weldless.

Cut shows form of Nos. 25 and 40.

These are drop-forged from self-aligning steel and are of such design that they will run smoothly at all speeds for trucking. Extra marked "on No. 25" is all-aluminum, no drop, for extra length at all other changes, and for.

Prices will be given for special forms on receipt of model or drawing and specifications stating quantity required.

Dimensions show sizes of unfinished forgings.

Steering Rod End.

Forging No. R. G. 28.

DIMENSIONS:

Length over all.....	2 1/2 inches
Length of Shank.....	1 1/2 "
Diameter of Shank.....	3/4 "
Length of opening in jaw.....	1 1/2 "
Width " " " " " "	7-16 "
Price, each.....	28c.



STARTING LEVER.

Furnished Unfinished Only. Quantity Discount on Application.

DROP FORGED.

Nos. 21 and 24 A.

Length over all, 9 1/2 inches.....	Price \$0 60
Length, c. to c., 6 1/2 inches.....	60
Length Hubs—Large, 2 1/2 in. Small, 1 1/2 in.....	60
Diam. Hubs—Large, 1 1/4 in. Small, 3/4 in.....	60

CONNECTING RODS.

Furnished Unfinished Only. Quantity Discount on Application.

DROP FORGED.



No.	Length Web, c. to c.	Thickness Webb.	Diam. Head.		Thick. Head.		Price.
			Small	Large	Small	Large	
21A	7 1/2	1 1/4	1 1/2	1 3/4	3/4	1	\$1 00
24A	7 1/4	1 1/4	1 1/2	1 3/4	3/4	1	1 00

BRONZE CASTING CONNECTING ROD.

No.	Length of Webb, c. to c.	Thickness Webb.	Diam. Head.		Thick. Head.		Price.
			Small	Large	Small	Large	
0	9 3/4	3/4	1 1/2	2	1 1/4	2	\$2 50
1	12	3/4	1 1/2	2	2 1/2	2 1/2	2 75
1A	1 1/2	3/4	1 1/2	2 1/2	2 1/2	2 1/2	3 00



PRICE OF STARTING LEVER HANDLES.

Number	00	0	1	2	3	4	5	6	7
Length Shank.....	3/8	3/8	3/8	3/8	3/8	1	1 1/4	1 1/4	1 1/2
Length over all.....	2	2 1/4	2 3/4	3 1/4	3 3/4	4 1/4	5 1/4	5 3/4	6 1/4
Diameter Shank.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Price, each.....	\$ 04	05	06	08	10	12	14	16	22

A NEW BOOK.

"All About the Automobile"

640 Pages, with nearly 500 Illustrations.

A fine publication..... \$5 00

ADDRESS A. L. DYKE, 1402 PINE ST.

IGNITER LEVERS

(Unfinished)

For Gas Engines.

Patent drawing will be sent on request.

Prices will be given for special Igniter Levers on receipt of model or drawing and specifications stating quantity required.

Dimensions show sizes of unfinished forgings.

NOTE—Diameter of lug on head on B2 is 1/8 instead of 1/4.

Diameter of stem of B14 is 1/8 instead of 1/4.

The length of lug on head on C4 is 1/8 instead of 1/4.

F style of stem starts with F2 instead of F6.

Brake Step.

Forging No. 7.



DIMENSIONS:

Diameter of Pad.....	2 1/2 inches
Length over All.....	8 1/4 "
Distance Center to Center of Bosses.....	3 1/2 "
Diameter of Large Boss.....	1 1/2 "
Diameter of Small Boss.....	3/4 "
Price, each.....	60c.

Rod Ends.

Forgings.

These Rod or Stub Ends are drop-forged from mild steel that welds easily. They will be found of great service in general shop use or machine manufacture as ends of Connecting Rods, Oscillating Bars, Shifting Levers, Eccentric Connections, Yoke Heads, etc., etc.

Prices will be given for special forms on receipt of model or drawing and specifications stating quantity required.

ORDER BY NUMBER.

Number	SHANK		HEAD		Price each
	Diameter	Length under head	Diameter	Thick. ness	
2-A	5-16	3 3/4	3/4	7-16	\$ 10
3-A	3-8	1 3/4	1	3/8	10
5-A	1-2	4 3/8	1	1 1/2	15
6-A	9-16	2	1 1-16	7-16	15
7-A	5-8	2 3/4	3/4	15-32	15
7-B	5-8	4 3/8	3/4	3/8	25
7-C	5-8	1 1/2	1 1/4	3/8	25
9-A	3-4	3 3/4	1 1/4	3/8	30
14-A	1 1-16	5 3/4	2 1-16	1 1/2	00

FURNISHED UNFINISHED ONLY.

As the Ignition Battery is the Heart and Soul of your Automobile, why not be sure you have the **best?** With our Batteries on your Machine, you can "get there" and "get back."

This is not mere guess work, but a fact demonstrated every day by owners of Automobiles equipped with "Columbia" dry cells and "Autocells."

On the following pages we show a line of ignition batteries designed to meet all conditions of service and of different sizes adapted to various makes of machines and suitable for all forms of wipe spark or jump spark ignition.

We are furnishing Batteries for Automobiles, Launches and Stationary and Portable Gas and Gasoline Explosive Motors.

The "Autocell" consists of either three or four especially constructed dry cells in a sealed metal case. Each individual cell is surrounded by an insulating material, making the battery as a whole water and moisture proof.

The connections are made in such a manner as to absolutely prevent trouble from loose or imperfect contacts. This has been a source of great annoyance to automobilists in the past.

The best grade of flexible rubber covered wire of ample cross section is used in connecting up the cells.

The "Autocell" is furnished with either flexible wire connections or binding posts, as desired.



No. 48.



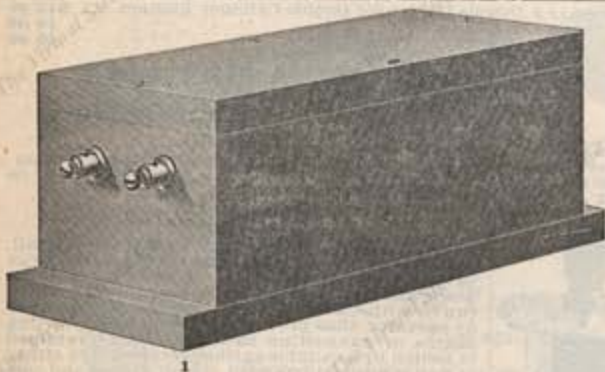
No. 46.



No. 36.

TYPE 48, 46, 36, WITH EITHER BINDING POSTS OR FLEXIBLE CONNECTIONS.

TYPE.	LENGTH.	HEIGHT.	WIDTH.	WEIGHT.	VOLTS.	PRICE EACH.
36	8 in.	8 in.	3 in.	11 lbs.	4½	NET \$2 25
46	10¾ "	8 "	3 "	15 "	6	2 50
48	15¾ "	9¼ "	4½ "	34 "	6	6 00



1



2



3

SPARK COILS.

FOR WIPE SPARK OR LOW TENSION WORK.

- | | |
|--|-------------|
| 1. Water-proof, wood case spark coil | \$4 00 each |
| 2. Ordinary eight-inch spark coil | 2 00 each |
| 3. Dyke's Standard Special Wound Coil for wipe spark | 2 50 each |

SPECIAL COLUMBIA ROUND DRY BATTERY.

TYPE.	HEIGHT, INCHES.	DIAMETER, INCHES.	WEIGHT, POUNDS.	VOLTS.	PRICE, EACH.
Spec. Col. No. 6	6	2½	2¼	1½	\$ 40
Spec. Col. No. 7	7	3	3¼	1½	1 40
Spec. Col. No. 8	8	3½	5¼	1½	1 50

Batteries for Gasoline Engine Ignition.

FOR AUTOMOBILES, LAUNCH and STATIONARY ENGINES.

NEW EXCELSIOR COMPOUND DRY BATTERY.



NEW EXCELSIOR COMPOUND.
No. 1 Size.

Length.....	No. 1.	13 1/2 in.
Width.....		8 3/4 "
Height.....		5 "
Volts.....		6
Amperes.....		25 to 30
Price.....		\$5.00 List.

This is a very handy size and is used by a number of leading manufs. We would advise the use of two of these batteries connected in such a manner that you can run one battery, say for a day, then the other set, giving the previous one used a chance to recuperate. In this way you will have long and continued "good service."

The above batteries are contained in a tin enameled case.

NEW EXCELSIOR "ECLIPSE" BATTERY.



NEW EXCELSIOR "ECLIPSE."
No. 3 and 4 Sizes.

Above connected in a tightly sealed tin case amply protecting from short-circuiting.

No. 3.	No. 4.
4 Cells Connected	6 Cells Connected
Volts..... 6	Volts..... 9
Amperes..... 35	Amperes..... 45
Length..... 14 1/2 in.	Length..... 15 1/4 in.
Height..... 9 "	Height..... 9 "
Width..... 6 3/4 "	Width..... 6 3/4 "
List Price \$10.00	List Price \$13.50

This is made in two sizes larger than the above, although the above battery will run your coil just as good as these larger ones; the advantage in using the larger battery is in the fact that the No. 3 and 4 New Excelsior Eclipse have a longer amperage or longer life. In other words, by using two sets of this size—say two sets of No. 3 or No. 4, you can run one set for a day or so, then run the other set, and so on.

This new

EXCELSIOR ECLIPSE

is also contained in a tin enameled case and made in two sizes—No. 3 and No. 4.

"ECLIPSE" SINGLE CELL BATTERY.



"ECLIPSE" CELL.

Absolutely Reliable. Single Cell.

Volts..... 1.5	Width..... 2 1/4 in. same.
Amperes..... 25	Length..... 6 "
Height..... 7 1/2 in.	List Price..... \$2.25

Joints of these cells are generally connected together.

They are used principally for stationary and boat engines, where there is plenty of room.

This is undoubtedly the largest and most efficient

DRY CELL MADE.

It is the type that was used in the government gasoline Life Boat during the Buffalo Exposition, and is being used by several leading automobile manufacturers who have plenty of room for

Bike Motor and Light Batteries.



NEW EXCELSIOR COMPOUND DRY BATTERY.

For Motor Cycle. Sizes 0 and 00.

This tube contains three single cells of battery and is intended to hang from frame. The No. 00 size being a little larger will last a little longer, yet for its length of life (which is long) No. 0 will spark your engine just as well as No. 00.

No. 0.	List	No. 00.	List
Length.....	18 1/2 in.	Length.....	21 in.
Width.....	1 1/4 "	Width.....	2 3/4 "
Volts.....	6	Volts.....	6
Amperes.....	12 to 15	Amperes.....	16 to 20
Price.....	\$2.75	Price.....	\$3.00



SINGLE CELL USED IN No. 00 AND No. 00.

SINGLE CELLS.—Our 6 in. x 2 in. Cell is giving very general satisfaction. We can unqualifiedly recommend it. Price, each cell, 35c.

No. 00 SINGLE CELL—Little larger than No. 0.

Price 45c.

These Cells are put in the No. 0 and No. 00 Tubes when those which come with the Tube are thoroughly exhausted.

SOME CYLINDRICAL SIZES.

Size 8 x 5 1/2 inch	Price \$1 05
" 7 1/2 x 4 1/4 "	" 99
" 7 x 4 "	" 70
" 6 x 2 1/2 "	" 45
" 6 x 2 1/4 "	" 35

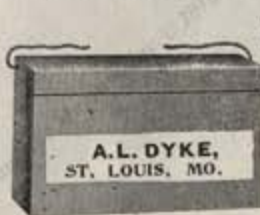
No. 000 Battery

Is intended for Tricycles, Quadricycle lesor Bike Motors, when the latter machine has room for same; its special shape may please you better than the long tube. This type also suitable for light autos.



No. 000 Battery.

Volts..... 6	Length..... 9 in.
Amperes..... 10 to 20	Width..... 2 1/4 "
Height..... 6 3/4 in.	Price..... \$3.00 List



TYPE D4 BATTERY.

This special battery was designed to fit the De Dion Quadricycle Battery Case and others. It is put up in an insulated case—4 cells being arranged therein. This is a very powerful battery. We can supply the tin enameled cases to take these batteries, with hinged side, opening from side, for \$3.50.

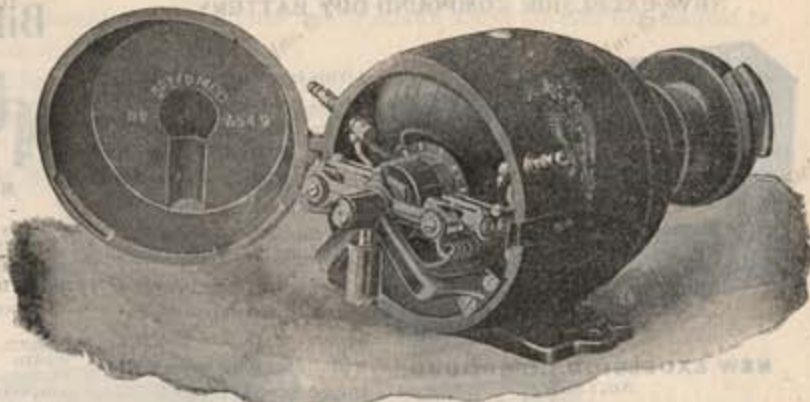
Dimensions, etc., D4 Battery.

Length.	Height.	Width.	Weight.	Volts.	PRICE.
12 in.	7 1/2 in.	3 in.	16 lbs.	6	\$7.50 List

THE APPLE IGNITING DYNAMOS AND ATTACHMENTS. FOR AUTOMOBILE AND GAS ENGINES.

CUT No. 1 represents the Type "E" Dynamo closed, Cut No. 2 shows the same with door open, Cut No. 3, Dynamo fitted with belt governor, and Cut No. 4 fitted with friction governor. This dynamo is guaranteed to be the most complete and best made igniting dynamo on the market and is sold at as low prices as other dynamos of other make. As will be seen from cuts it is absolutely water and dirt proof when closed and yet has ample provision for easy accessibility to its working parts, even when running, and is the only machine on the market with these valuable points.

The governor attachments are valuable and almost a necessity on gas motors varying in speed, as they will regulate the speed of the dynamo, no matter what is the speed of the engine. The belt clutch governor, shown on Dynamo Cut No. 3, is also made for friction and gear drive when desired, as shown by Cuts Nos. 4 and 5.

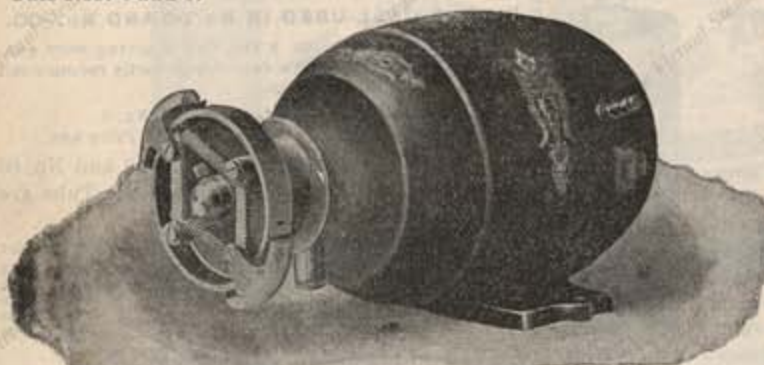


Cut No. 2. Type E with Door Open.

LIST PRICES.

	Price. LIST.
Type "E" Igniting Dynamo, no case	\$18 00
Type "E" Igniting Dynamo, Spark Coil in base.....	20 00
Type "E" Igniting Dynamo, Jump Spark Coil in base	30 00
Governor Pulley for above Dynamos (Belt).....	5 00
Governor Pulley for above Dynamos (Friction).....	5 00
Starter with Switch for use with Dynamos.....	10 00
Spark Coil, Separate.....	2 00
Dyke Jump Spark Coil, Separate.....	9 00

We are Selling Agents for Apple Dynamos and carry a large stock at all times. They are now being used successfully on some of the leading Automobiles manufactured in this country.



Cut No. 3. Type E Fitted with Belt Governor Pulley.

The Apple Type A Igniting Outfit.

This outfit is designed more particularly for stationary engines, but may be used to advantage for marine purposes. It is put in this shape to meet the demand for a dynamo and battery outfit that can be readily set up and cared for by men not versed in electrical wiring.

This outfit can easily be placed on a post, side wall or floor, whichever is the most convenient, and may be driven from a shaft or fly-wheel that is either parallel with or perpendicular to the outfit. Belt or friction drive can be used, as the pulleys furnished are interchangeable.

By simply loosening two machine screws the dynamo may be turned at any angle without moving the outfit.

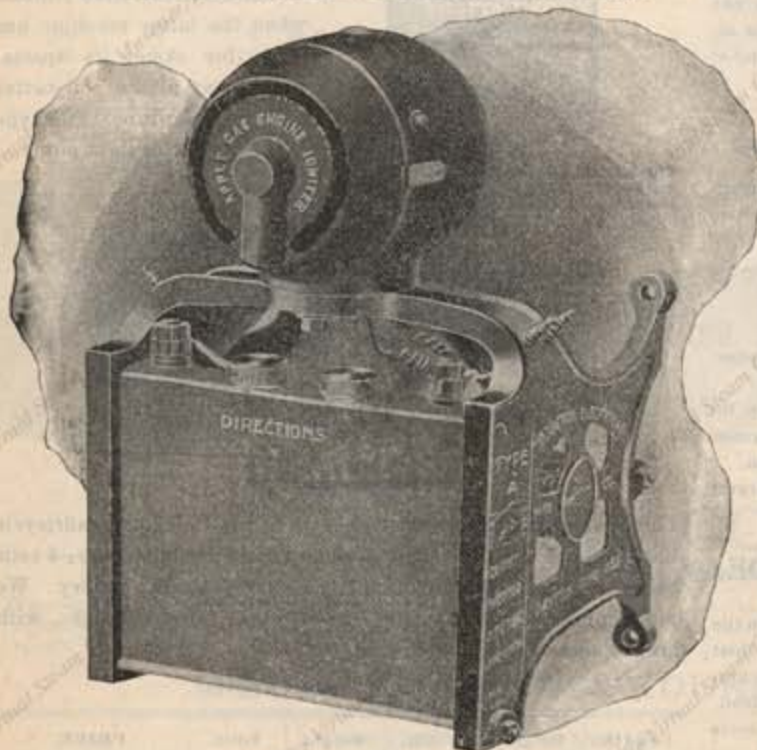
In using this outfit the spark to start the engine is taken from



Cut No. 4.
Belt Governor arranged for Friction Drive.




Cut No. 5.
Belt Governor arranged for Gear Drive.



Apple Type A., Igniting Outfit.

the battery, and as soon as the engine is up to speed the switch is thrown to the dynamo side and spark is then taken from the dynamo, which at the same time automatically recharges the battery.

The battery is a two cell, three plate, four volt storage battery. There is not a joint in it and is designed for ignition purposes. It is almost entirely sealed and is shipped fully charged and ready for use. **Retail Price complete, \$30.00.** List.

 **\$35 FOR MOTOR ALONE.**

DYKE'S AIR-COOLED BIKE MOTOR

MOTORS AND CASTINGS.

These motors are correctly designed to fit on the ordinary bicycle frame; it is neat in appearance, light in weight, but strong and powerful. It develops $1\frac{1}{4}$ -horse-power at 1,000 revolutions. Electric ignition by Jump Spark method, which allows easy control of speed and power by variation of time of ignition.

Workmanship and material first-class in every particular. Every motor guaranteed in every respect.

1 $\frac{1}{4}$ CYCLE MOTOR.

This motor is especially adapted to use on bicycles.

SPECIFICATIONS.

Weight	22 pounds
Length of Stroke	2 $\frac{1}{2}$ inches
Diameter of Piston	2 $\frac{1}{4}$ inches
Height	14 $\frac{1}{2}$ inches
Diameter of Casing	6 $\frac{1}{2}$ inches
Width of Casing	2 $\frac{1}{2}$ inches
Total Width of Motor	5 $\frac{1}{4}$ inches
Revolutions per minute	1000 to 1800
Motor only, Price, Aluminum Crank Cases	\$35 00

Castings.

For the Accommodation of those who wish to construct these motors themselves, we can furnish complete sets of castings and other parts, including Blue Print Working Drawings with each set.

Complete Set of Castings, including Cylinder and Head, Crank Case, Balance Wheels, Piston and Rings, In-Take Valve, Connection Rod, Gear Case Cover, Ignition Case and Cover.

SETS WITH CAST IRON CRANK CASE.

1 $\frac{1}{4}$ -Horse-Power	LIST.
1 $\frac{1}{4}$ -Horse-Power	\$12 50
1 $\frac{1}{4}$ -Horse-Power	16 00

SETS AS ABOVE WITH ALUMINUM CRANK CASE.

1 $\frac{1}{4}$ -Horse-Power	\$15 00
1 $\frac{1}{4}$ -Horse-Power	20 00

BRACKET FOR HANGING MOTOR will clamp to the tubing. This bracket is bolted to crank case by means of studs which hold the case together. Made of Brass. Price for 1 $\frac{1}{4}$ -H.-P. Motor **\$5 00**

Price for 1 $\frac{1}{4}$ -H.-P. Motor

REAR PULLEY rolled out of sheet steel, with lugs riveted for attaching to rear bike wheel. Price **\$5 50**

IDLER PULLEY OR BELT TIGHTENER. Price **\$5.00.** **RAWHIDE BELT.** Price **\$6 00**

DYKE'S BIKE MOTOR CARBURETTOR—The simplest and best Bike Motor Carburettor made for 1 $\frac{1}{4}$ or 1 $\frac{1}{2}$ H.-P. Price **\$6 00**

Engine, Each

DYKE'S BIKE MOTOR MUFFLER for 1 $\frac{1}{4}$ -H.-P. Engine or 1 $\frac{1}{2}$ H.-P. Price **\$3 50**

OUR No. 3 Coil.

This cut represents our No. 3 Coil, and it is manufactured especially for sparking Bicycles, Tandems, etc. Size is 10 inches long, 2 $\frac{1}{4}$ inches in diameter and weight about 4 pounds. This coil has four terminals and can be easily attached to the frame of any bicycle. It is just what is needed for this work and is constructed to work on a low voltage. Price, each **\$7 25**



No. 2 BIKE MOTOR COIL.

Is made on same line as No. 3, but is shorter. In some cases where the Coil is desired on back, across under the seat, this one will answer better than No. 3. Diameter,

3 $\frac{1}{4}$ inches; length, 7 inches; weight, 5 pounds. Price **\$7 25**

MOTO-BIKE, less Motor, etc. Extra heavy frame, 14-gauge tubing, 168 x rear stays. Height 22 or 24 inches, fitted with M. & W. double-tube tires, 1 $\frac{1}{2}$ inch. Moto-Bike Saddle fitted with adjustable handle bars and notch grips. One-piece crank shaft. Any style coaster brake on the market. Enamelled any color. Price, with wood-rim Wheels, **\$55.00.** With steel rims add **\$4.00.**

1 $\frac{1}{2}$ H. P. TRICYCLE MOTOR.

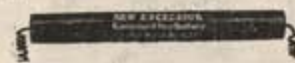
This motor is especially suitable for Tandems and Tricycles, and will develop at 1000 revolutions per minute $1\frac{1}{4}$ -horse-power; 1400 revolutions, 2-horse-power.

SPECIFICATIONS.

Weight	50 pounds
Length of Stroke	3 $\frac{1}{4}$ inches
Diameter of Piston	3 inches
Height	18 $\frac{1}{2}$ inches
Diameter of Casing	9 $\frac{1}{4}$ inches
Width of Crank Case	3 $\frac{1}{2}$ inches
Total Width of Motor	7 $\frac{1}{4}$ inches
Revolutions per minute	1100
Motor only, Price, Aluminum Crank Cases	\$50 00

Price Machine Work on Castings.

PRICES NET.	1 $\frac{1}{4}$ H.-P.	1 $\frac{1}{2}$ H.-P.
Machining Cylinder, Complete	\$3 00	\$6 00
Machining Cylinder, Head and Valve Seats	2 00	3 00
Fitting Pistons and Rings	2 50	3 50
Making Valves and Stems, each	75	1 00
Machining Fly Wheels	4 00	6 50
Machining Connecting Rods	1 00	1 75
Fitting Air Valve	2 00	2 25
Machining Crank Case	2 50	6 25
One Set 2 to 1 Gears	1 50	2 50



Dyke's Motor Battery No. 0 and No. 00.

NEW EXCELSIOR 60 COMPOUND BATTERY.

No. 0	No. 00
SIZE.	SIZE.
Length.....18 $\frac{1}{2}$ in.	21 in.
Width.....1 $\frac{1}{4}$ in.	2 $\frac{1}{4}$ in.
Volts.....6	6
Amperes.....12 to 15	16 to 20
Price.....\$2 75	\$3 00

This Tube contains three cells of battery, and is intended to hang from frame. The Spark Coil is strapped directly underneath it. No. 00 is a little larger than No. 0 and will last a little longer.

For Different type Bike Motor Battery see page 29, No. 000.

HARD RUBBER GRIPS with Switch attachment **\$3 00**

Dyke's Jump Spark Plug.



Special Pattern Imported Glazed Porcelain. Price, $\frac{3}{4}$ inch or $\frac{1}{2}$ inch...**\$1 50**
Genuine Iridium Points.

BATTERY VOLT-METER.

Reading 0 to 3 Volts in 1-10th Divisions and 0 to 10 Volts.



A convenient and practical instrument for those who either sell or use Primary and Storage Batteries. Particularly adapted for use in the Telegraph, Telephone, Electric Gas Lighting and Bell Work. Experimental Work, Motor Vehicles, and various other places where batteries of any description are used. Its range will cover two cells of Primary or one cell of Storage Battery; is DEAD BEAT in its readings. Simple in construction and not liable to injury with ordinary use. Non-removable nuts on strong contact-posts. Small in size; light, and of convenient shape to carry in pocket.

The accidental connecting of eight or ten cells to the instrument is not liable to injure it.

For ordinary testing purposes, the poles are interchangeable, thus saving much time to the user.

Price, 0 to 3 Volts, \$4.50. 0 to 6 Volts, \$8.50. 0 to 10 Volts, \$10.00.



Volt-Meters and Volt-Ammeters.

For Testing Storage and Primary Batteries of all kinds and for General Measurements.

These instruments are accurate and reliable and are guaranteed against defects. They are of the permanent magnet type and are made in a thorough manner, electrically and mechanically, on the same principle as the best of the large instruments. The magnets are of special imported steel and are carefully aged. The pivots of the moving parts are hard and sharp and rest in jewels. Each instrument receives careful attention and adjustment and its scale is made separately by hand. The instruments are used by the leading electrical and automobile companies.

Volt-Ammeters for Testing Dry Batteries, Etc.

0 to 10 and 1 to 10 in fourth ampere scale div's	\$12 50
0 to 10 and 0 to 15 in half ampere scale div's	17 50
0 to 10 and 0 to 20 in single ampere scale div's	17 50
0 to 5 and 0 to 15 Volts and 0 to 30 amperes	19 00

Voltmeter for Testing Single Cells of Storage Battery.

0 to 3 Volts in twentieth volt divisions, above 1 1/2 volts	\$15 00
Morocco Leather Case, \$1.00	

The HYDROMETER SYRINGE.

For Testing the Specific Gravity of the acid of Storage Batteries or for Testing the Purity of the acid of Primary Batteries. It is a simple and accurate instrument for testing the purity of the acid of Storage Batteries or for Testing the Purity of the acid of Primary Batteries.

It is an instrument for testing the specific gravity of a liquid, or for testing the purity of the acid of Storage Batteries or for Testing the Purity of the acid of Primary Batteries. It is a simple and accurate instrument for testing the purity of the acid of Storage Batteries or for Testing the Purity of the acid of Primary Batteries.



GASOLINE TESTING OUTFIT, No. 2. Complete, \$90.

Mr. F. C. Donald, President of the Chicago Automobile Club, says:

"A further use of STAINOFF confirms my previous opinion. The celerity with which it obliterates all manner of handstains heretofore defying gasoline, scrub-brush, and copious use of the best soaps obtainable, without objectionable after results is simply marvelous, and I make no question it is destined to become a part of the outfit of every automobilist who may learn of its merits."

Henry Fournier, French Champion Automobilist of the World, says:

"I have used your STAINOFF and found it more effective than anything I have ever used. It quickly removes the stain of machinery grease and grime which an automobilist cannot help but get on his hands from working with his machine. It is pleasant to use, and leaves the skin soft and white. It is a great convenience for all automobilists."

STAINOFF is most convenient, being put up in the shape of a shaving stick, and considering its lasting qualities, it is less expensive than any other preparation—soaps or otherwise—upon the market. A 25-cent stick of STAINOFF will outlast 50 cents worth of soap or other preparation and will not injure the skin as alkalies, acids, and scouring materials do. It will keep the hands beautifully white, soft and clean.

PRICE PER TUBE, AS SHOWN ABOVE, 25c.

Special Price on gross lots.



AUTOMOBILISTS, and all who handle motor vehicles, will instantly appreciate the value of

STAINOFF.

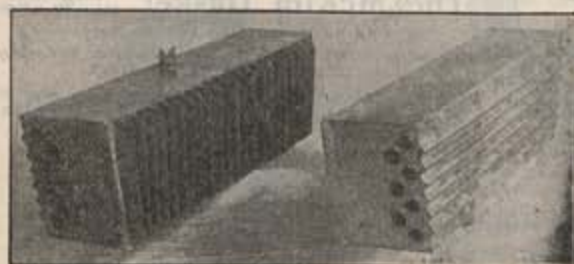
The difficulties heretofore experienced in removing the stains resulting from the admixture of lubricating oils and dirty metallic surfaces, are well known, but

STAINOFF

has at one single stroke removed the difficulty—as quickly as it removes the stains.

Copper Corrugated Water Tanks.

FOR No. 1 VEHICLE.



These Tanks are intended to be placed in the side of the body. No radiating tube is necessary when this style tank is used.

Price complete, per pair, as shown, with tubes running through \$16 00
Without Tubes 14 00

We make other styles to go under seat.

"INSURANCE" GASOLINE TANKS.

Economy.
Safety.
Weatherproof.

Suitable for USERS of Gasoline or Steam Machines, Naptha Launches, Gasoline Engines, etc.



DIMENSIONS IN INCHES.

Capacity.	Height.	Width.	Length.	Weight Crated.	Price.
60 Gal.	45	22	27	115 lbs.	\$12 00
110 "	48	25	36	155 "	16 00
100 "	48	26	40	155 "	20 00
210 "	54	30	43	235 "	24 00
260 "	54	30	51	280 "	28 00

You Simply Can't Afford to be Without It.

DYKE'S No. 1 AUTOMOBILE TOOL SET. (Rolls up.)

The first Automobile Tool Set on the American market. A select lot of tools. All are nickel plated. Contained in an elegant leather carrying case.

Something you need. Keeps the tools in place. Several combination tools which can be used for various purposes. The case has a pocket attachment for screws, etc. All tools guaranteed.

List of Tools Separately.

Fig. 1. Combination Knife and Screw Drivers, 4 in. long.

Fig. 2. Small best Tool Steel, 5-16 x 4 inch Chisel.

Fig. 3. B. & S. Automobile Wrench, 10 in. long, case hardened.

Fig. 4. Small, 3/4-pound hammer.

Fig. 5. 4-inch Champion Screw Driver

Fig. 6. 7-in. Universal Pliers.

Fig. 7. Combination Pipe and Nut Wrench. Leather Carrying Case, best grade leather, with receptacle for each tool, pocket for screws, etc.

PRICE.

Leather Case, Felt Lined and

Cover, Nickel Plated Tools, \$15 00

Canvas Case, Felt Lined and

Cover, Semi-Finished Tools 12 50

If you want your name on the case

add 50 cents.



Dudly's Auto-Wrench.

The Most Practical Pocket-Wrench Made.

This tool is intended to be used on Automobiles. It is the favorite for the Gasfitter, the Machinist, the Electrician, the Engineer, the Bicycle repairer, or anybody else that has use for a wrench.

The mechanical features are novel and the combination makes the tool almost an universal one. The wrench opens to hold a 1 1/4 in. square or hexagon nut and will hold any small pipe, rod, bolt, or stud from 1/2 to 1 inch.

The wrench is made of drop forged tool steel and nicely nickel plated. Each packed in a box.

Length, 7 1/2 inches. Weight, 12 oz.

List Price, each \$1.10



The Xander Automobile Jack and Torch Heater.

The above illustration shows the jack used as a torch heater. Place a little gasoline into trough, and light with match. Will heat in a few minutes. May be used as an automobile jack also.

List, each \$2.25



Adjustable Lifting Jack

These Jacks are made of the best iron and steel. They are half-bearing and every part interchangeable.

	WILL RAISE.	ADJUSTS.	PRICE.
No. 1.	2,000 lbs.	12 to 19 inches.	\$2 75
No. 2.	3,000 lbs.	15 to 27 "	3 00
No. 3.	8,000 lbs.	16 to 26 "	4 00
No. 5.	2,000 lbs.	16 to 17 "	2 75

IMPROVED COMBINATION PLIERS.

GAS PLIERS, WIRE CUTTERS, WRENCH AND SCREW DRIVER COMBINED.



Pat. Jan 25-76
MAR 25-84
MAR 12-1900

From forged iron tool steel and finished to match and black. By a number form of lip handle and sliding from one side to the other, which is done instantly, changes from side of gas burner to Spanish plug and from 3.0 inch round to 1.0 inch round or square.

List price, each, \$1.00. Black finish.

COMBINATION MAGAZINE KNIFE AND SCREW-DRIVERS.
Patent Office, March 12, 1893, February 4, 1896.

COMBINATION MAGAZINE KNIFE AND SCREW DRIVERS.

Billing's Patent, March 12, 1893, February 4, 1896.



Three sizes of Screw Drivers and One Knife. Instantly within the handle. A simple and perfect device. By raising the lock the knife and screwing forward the slide to and of the knife, the blade will swing out. Never the blade wanted and draw the slide back over the handle and lock it ready for use.

List price, each, \$1.25

GRIPS FOR AUTOMOBILES, MOTOR BICYCLES AND MOTOR TRICYCLES.

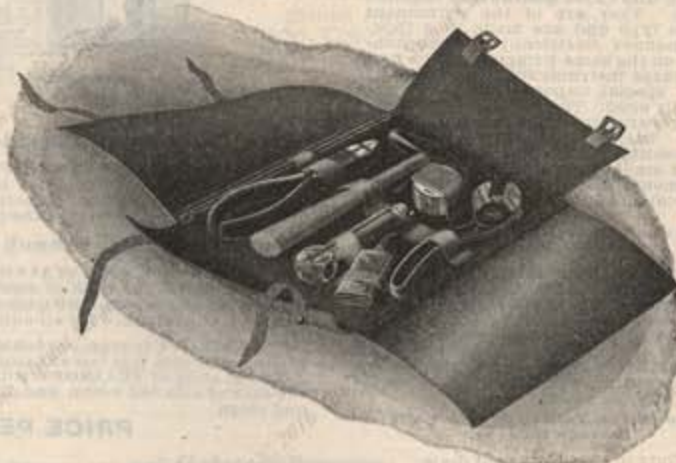
	Each
Pyralian Grips—All the colors of the rainbow	\$ 50
Pearl Grips—These are very handsome and suitable for fancy finished autos	1 25
Sponge Rubber Grips—These Grips absorb all vibration from Steering Levers	
Plain Rubber, list price	25
Leather Covered, list price	40



GRADEMETER.

The Grademeter will tell you the exact grade at which you are climbing.

Price \$1 25



Dyke's
No. 2
Auto
Tool
Set.

Especially designed for electric vehicles. Folds up in small, compact space. Can be put under Cushion. Handy for any type machine. Leather case. Best grade Tools. Price, complete, \$8.00.

The McKim Gasket CANNOT BLOW OUT.

Can be Re-applied Indefinitely.

Asbestos lined Gaskets for Gasoline Motors, standard sizes, always in stock.

Note.—In ordering these Gaskets give size of union, viz: A 3/4-inch Gasket fits a 3/4-inch union, etc.

STOCK SIZES FOR STANDARD LIP-UNIONS.

Size of Pipe, Inches.	Inside Diameter Gasket—Inches.	Outside Diameter Gasket—Inches.	Price Per 100.
1-4	9-16	7-8	\$1 00
3-8	9-16	15-16	1 20
1-2	13-16	1 3-16	1 50
3-4	15-16	1 1-2	2 25
1	1 3-16	1 3-4	2 75
1 1-4	1 1-2	2 3-16	3 00
1 1-2	1 3-4	2 1-2	3 50
2	2 1-4	2 7-8	4 75
2 1-2	2 15-16	3 5-8	4 50
3	3 5-8	4 1-4	6 00

Solar Special Auto Gas Headlight.

Our 1908 Auto Lamp Winner. Shows all the latest improvements. Has a lens of 10 inches in diameter. It is made of brass and is finished in nickel. It has a lens of 10 inches in diameter. It is made of brass and is finished in nickel. It has a lens of 10 inches in diameter. It is made of brass and is finished in nickel.

The Solar Automobile Lamp.

Of same construction as the Standard. Fitted with socket on back to fit standard gas lamp. Has a lens of 10 inches in diameter. It is made of brass and is finished in nickel. It has a lens of 10 inches in diameter. It is made of brass and is finished in nickel.

Solar Standard Carriage Lamp.

The most popular style lamp of 1908, and the one generally accepted for all ranges and purposes. It is made of brass and is finished in nickel. It has a lens of 10 inches in diameter. It is made of brass and is finished in nickel.

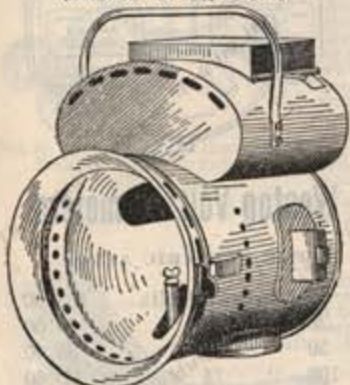
THE 20th CENTURY CARRIAGE and AUTOMOBILE HEADLIGHTS.

Style A—Diameter of Body, 3 1/4 inches. Depth of Body, 1 1/2 inches. Side Flange, 2 1/4 inches. Front Flange, 4 1/4 inches. Extreme Length, 9 1/4 inches.

DYKE'S STANDARD AUTOMOBILE ACETYLENE GAS LAMP.

NET PRICE per Pair, \$10 00

No. 4—Diameter of Body, 3 1/4 inches. Depth of Body, 1 1/2 inches. Side Flange, 2 1/4 inches. Front Flange, 4 1/4 inches. Extreme Length, 9 1/4 inches.

Solar Headlight (FRENCH TYPE) No. 4.

Will project an intensely powerful light 1,000 feet ahead. Burns 8 hours. Suitable for all types of touring or racing cars. Made entirely of brass, 12 inches high, 10 inches long, with 7-inch light opening, removable parabolic reflector. 1-2 foot tip and lens door. Has lug on both sides and can be used as single lamp or in pairs. Generator is independent of lamp and can be removed for filling. Gas turns on or off.

List Price, Nickel and Enamel, \$30.00. Full Nickel or Brass, \$35.00.

**Generator Lamps**

As shown in accompanying cut, have the same general lines as the Special Automobile Headlight, removable parabolic reflector, lens door and one-half foot tip; also a 1 1/4-inch rear red signal. Are fitted with two lugs on single lamps and one lug when used in pairs. Single lamps are adapted for small launch headlights or search lights. Project intense light 1,000 feet.

Above cut shows No. 2 Generator and Special Auto Headlight Lamps.

No. 2 Generator (1 light) . . . Price \$10.00
No. 2 Generator (2 or 3 lights) . . . Price 15.00

Generator Lamps

Nickel and Enamel Finish . . . per pair \$15.00
Full Nickel or Brass Finish . . . per pair 25.00

**Solar Electric Lamp Styles**

Parts as shown above. No. in order.
No. 555 B pair, \$11.00 No. 557 . pair, \$11.00
No. 554 . pair, 9.00 No. 558 . pair, 30.00
No. 556 A pair, 17.00 No. 555 A pair, 14.00
Headlights as shown in center. No. in order.
No. 560 . each, \$4.00 No. 561 . each, \$7.50

Solar Electric Vehicle Lamps

Are like all other lamps of our make, specially constructed so that they will withstand the use to which they must be subjected without jarring to pieces like other converted cheap oil lamps. They are of unique but simple designs, richly finished, and add beauty and dress to the different styles of vehicles for which they are intended. Have full silver lining inside, outside trimmings in nickel to withstand weather, are fitted with 1 1/4 inch red rear jewels, bevel French plate side glasses, medium size finger iron lugs, and equipped with 8 c. p. 40 v. incandescent bulbs and bases, but not wired. We make a large variety of styles and sizes, not shown in the accompanying cut, fully guaranteed. Liberal discounts to manufacturers and dealers.

DIETZ AUTOMOBILE HEAD LIGHT. FOR KEROSENE.

Front 7 1/2 inches diameter, extension back and top piece sockets on both sides for "E" Holder, continuous reflector, no red light in rear. Exactly suitable for headlight on a light machine.

LIST PRICE.

Japanned black, Nickel Trimmings . . . \$9 50
Polished Full Brass . . . 13 50
Holder, Style E . . . 2 00
Extra Lens . . . 1 00



DIETZ AUTOMOBILE LAMP.

The Practical Advantages of DIETZ TUBULAR AUTOMOBILE SIDE LAMPS

(Shows White Light in Front, Red in Rear) may be summarized as follows:
It throws its entire volume of light straight ahead for a distance of 200 feet or more, lighting up the whole road.
It burns with a clear white penetrating flame of 20 candle-power (United States Government test).
It does not smoke and is free from odor.
The lamp is handsome and durable.
It burns common kerosene oil (petroleum or coal oil).
It will not blow nor jar out, however rough the road.
It burns 24 hours with one filling.
List Price Side Lamps, Right or Left.
Each
Japanned black, Nickel Trimmings . . . \$5 50
Polished, full Brass . . . 10 50
Holder, Style C . . . 1 00
Holder, Style D . . . 1 00
Extra Lens . . . 1 00

AUTOMOBILE ACETYLENE SEARCH LIGHT.
Here is a Lamp that will throw a light 4-mile ahead. The reflector is placed on the front axle or where desired, and the generator which holds the carbide and water is placed on the inside of the dash or under the seat. The gas is conveyed to the reflector by a small rubber tube. A valve is included for shutting off or making the light as bright as desired. Reflector, 7 inches diameter; generator, 6 inches. Price, complete, with tube, etc. \$15 00

Solar Miners' Lamp



As shown in the cut the generator straps to the back and a small rubber tube leads to the flame chamber and reflector, which is very light and fastens to the cap. The generator is constructed so it always keeps cool, and lamp burns 10 hours, giving a brilliant white light, making it extremely suitable for mining work.

Price \$3.50 each

Solar Launch Headlight



Is 10 1/4 inches high, similar in construction to the standard carriage lamp, with 3 1/4-inch front lens, white, and 3-inch red and green side lights, projecting so as to be seen front or side as per U. S. marine laws, finished only in all nickel, and specially adapted for use on inland lakes or rivers, for open launches, and gives an especially strong, white front light. The gas generator is contained in and is a part of this lamp. Both Launch lights are fully guaranteed.

Price \$7.50 each

Solar Launch Lamp

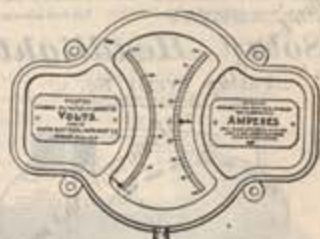


Is 12 inches high, fitted with 3-inch white bull's eye lens, and 4x4 1/4-inch red and green side lights, complying with U. S. marine laws. Burns ten hours. Made triangular shaped, entirely of brass and highly finished. Suitable for all styles of launches and especially adapted for use on inland lakes and rivers. The gas generator is not a part of the lamp, but can be removed for recharging.

Price \$12.00 each

THE GAS LANTERN.
The only **Safe** Lantern. No oil, no smoke. Gives twice the light of an oil lamp, and is positively odorless. Efficient operation; no jarring or blowing out. Polished nickel.

PRICE, \$3.50 NET



Weston Volt Ammeters.

FOR ELECTRIC AUTOS.

10 Amp., 75 Volts.....	\$35 00
25 " 75 "	36 00
50 " 75 "	35 00
100 " 75 "	35 60

CARBIDE.

Calcium Carbide put up in cans.

2-pound cans, each.....	\$0 36
2-pound cans, per case	
24 cans	7 68
5-pound cans, each	80
5-pound cans, per case	
12 cans	8 88
10-pound cans, each.....	1 40
100-pound cans, not crushed.....	11 00

40 per cent discount.

KILFYRE.

Should be carried by every owner of a steam Auto. It is a powder put up in a neat tin case 22 inches long, 2 inches in diameter and weighs 3 lbs. It is the only extinguisher that will put out gasoline, oil, grease or electrical fires. Good thing to keep in your barn or home.

Price, per tube..... \$3 00
May save its cost a hundred times.

SMALL INCANDESCENT LAMP.

Each
For Dyke's Hand-lamp, \$0 60
For Dyke's Water-light, 60



Shows Dyke's Hand Electric Light. Can be used with any style vehicle; throws light 100 feet; uses dry cells. Weighs but 18 ounces and is 6 1/2 x 3 x 1 1/2 inches in size. Can be carried in pocket. Convenient in time of break-down or accident at night, etc.....each \$4 00

Dyke's "Water Light."

A Device which should be used on all Steam Automobiles when driven after dark.

Includes three cells in box all wired, which may be placed anywhere in the vehicle Lamp, push button which can be easily sunk in the side of seat, ample wire for wiring, and can be fitted to any vehicle by anyone. Handy for examining gasoline motors as well as steam engines.

Price..... \$5 00



No. 9. Rigid Seat Bracket. For Carriages and Automobiles. (Patented.) Either side. Fastened on the seat with screws under the cushion without defacing the paint or varnish. If the side of seat is solid wood it passes around at the front to the proper position outside. If an open rail it sets between the spindles directly to the proper position. Lamp removed and bracket remains unnoticeable.
Price..... \$1 00



THE FAMOUS SALISBURY-BLERIOT ACETYLENE LAMP.

The style used on foreign machines. Extra large and powerful. Enables the swiftest Automobiles to travel safely at the highest possible speed without the slightest danger of its being accidentally extinguished either by the fury of the elements or the vibration and jolting of the roughest roads. Price..... each \$30 00





Regulation Auto Cap.
Dull Mexican Kid, all Sizes \$2 50
Auto Silk 2 50

FRENCH STYLE AUTO CAP.

Made from Finest Mexican Kid Leather, or in Auto Silk, for Summer Wear.
Price..... \$2 50

AUTOMOBILE DRIVING GAUNTLET.



A new idea in Gauntlet. This gauntlet will prove a great comfort to both drivers of horses and to chauffeurs. Fitting, as it does, closely around the wrist, it excludes dust and rain and also prevents drafts up the sleeve, keeping the hands warm. It also protects the coat sleeve and at the same time has a neat and stylish appearance. This novelty adds one more to an already creditable line of our new things.

Made from fine Mexican Kid Leather in Black and Tan. List price, per pair, \$2 25



"ALL ABOUT The Automobile."

600 Pages, nearly
500 Illustrations.
You need it.

\$5.00.



THE "FOURNIER" LUNETTES.

The most practical protector from wind and dust. It consists of a metal plate to which are attached two large funnel shaped cups to hold the lenses. These cups are ventilated and are constructed so as to give a large lateral field of vision. Price..... \$4 00



SIDE VIEW "FOURNIER" LUNETTE.

The lenses are either white or smoked, and the Lunette is held to the head by an adjustable elastic band. It is lined with soft felt and bound with velvet.

DRIVING GLASSES.



We take pleasure in presenting a new Driving Glass with a patented collapsable eye shield, made of silk stockinette, which crushes down flat on the same principle as an opera hat, at the same time permitting ample ventilation and forming a complete protection from wind, dust or cold. The frame is strong, heavily nickel-plated riding bows, and has either white or smoked lenses. Price..... \$3 50

DYKE'S Automobile LEATHER CAP



AUTO LEGGINGS.

FRENCH IMPORTED LEATHER COATS.

Water proof. Worn in winter as top coat.
In all sizes. Price..... \$15 00

AMERICAN MADE AUTO COATS.

A copy of the French coat, made from the best American black leather, lined with blue flannel. All sizes. Price..... \$9 50

LEATHER AUTOMOBILE TROUSERS.

No. 82. First quality unlined black leather trousers. Made to order. List price, per pair..... \$6 00
No. 83. Same, but lined with Silesia..... 10 00

AUTO LEATHER VESTS.



PRICES ON REQUEST.



No. 1.



No. 2.



No. 3.

No. 1—Full Leather Gauntlet..... \$.....
No. 2—Medium Weight Fur Gauntlet.....
No. 3—Heavy Weight Fur Gauntlet.....

LUNETTES.

No. 73—Thin Silk, light weight..... \$2 00
No. 74—Gray Suede Leather, silk lined..... 2 50
No. 75—Similar to above, with extra pad to protect nose..... 4 25



Cut shows No. 74.

Eye Protector

Will protect the eye
from wind and dust.

Metal Rim, Mica.

Price, 50 cents.



LADIES' OR GENTS' AUTOMOBILE GOGGLE.

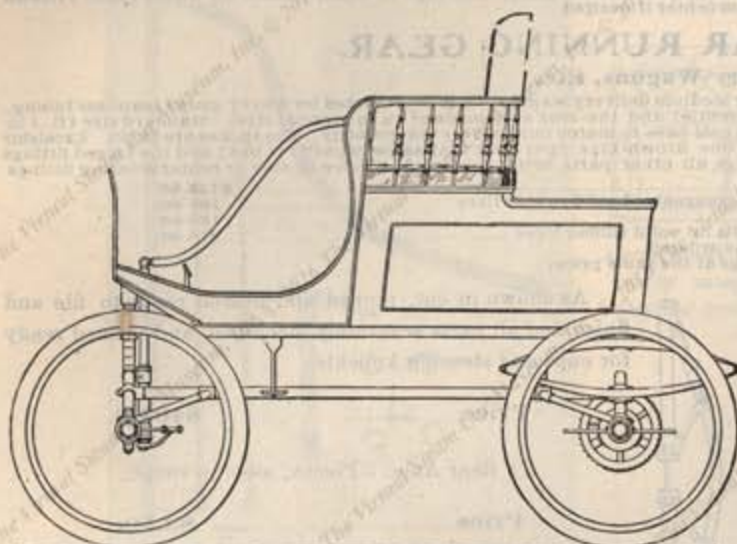
THIS TYPE SEEMS TO BE THE FAVORITE.

Nickel-plated frame, jointed nose-piece, white or smoke curved lenses, face protector of gray chamois, lined with silk and bound with chenille, shape as above illustrated.

Price..... \$3 50



No. 1 S STEAM OUTFIT. (TWO PASSENGER.)



LIST OF MATERIAL WHICH WE FURNISH WITH OUTFIT NO. 1 S.

Running Gear, with center steering fittings No. 1 S, page 40, enameled and nicked, with double acting band brake.
 Engine No. 18, page 44.
 Boiler 16x14, seamless steam shell and tubes with smoke dome attached.
 Burner 16 in., cast iron.
 Generator and Regulator, attached.
 Gauge, Steam, 300 lbs., nicked.
 Gauge, Air, 100 lbs., nicked.
 Auxiliary Hand Water Pump.
 Water Column, Safety Pin Valve Pattern.
 Pop Safety Valve.
 Throttle Valve and flexible connections. Pin Valves.
 Throttle and Reverse Levers, with bypass.
 Foot Brake Lever. Blow Off Valve.
 Pair of Rubber Pad Steps.
 No. 16. Body in the white and patent dash.
 25 ft. of $\frac{1}{4}$ -inch, I. P. Copper Connecting Pipe.
 10 ft. $\frac{1}{4}$ -inch Baldwin Block Chain.
 Air Tank. Gasoline Tank. Supply Water Tank.
 Muffler Tank, copper.
 Set 28x2 $\frac{1}{2}$ -in. A grade pneumatic tires.
 One 3-in. double tone Gong. Pair of Carriage Lamps.
 1 Mirror. 1 Cylinder Oil Cup.

This Outfit includes everything necessary, with drawing, to build a standard style of Steam Automobile. Any ordinary mechanic can purchase these parts and build a successful Machine.

PRICE, complete as described above.....	\$550
Set of Full Working Drawings.....	Net 5
Side Steering Fittings, extra.....	" 5

We will supply Concord pattern wood wheels with 1 $\frac{1}{4}$ solid rubber guaranteed tires without extra charge. For prices of either wire or wood wheels with American roller bearings, write us.

We do not furnish the complete vehicle, only the parts necessary to construct the above model. Should you want any change in this specification, write us, and we will give you special figures.

No. 2 S STEAM OUTFIT. (FOUR PASSENGER OR DELIVERY.)

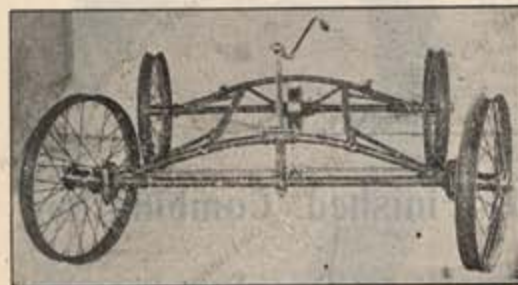
Same general outfit as described under No. 1, but surrey body and No. 2 S Gear for four passengers. Engine, 16x16 boiler, $\frac{3}{8}$ or $\frac{1}{2}$ -inch Baldwin Block Chain, 3-inch pneumatic tires, and fittings heavier in proportion to carry the extra weight.



PRICE, complete outfit.....	\$600
Price for full set of Working Drawings.....	Net 5

No. 1 S RUNNING GEAR.

SPECIFICATIONS



Shelby seamless steel tubing, front and rear. Top tubes and reaches 1 $\frac{1}{4}$ in., lower tubes, front and rear, 1 $\frac{1}{2}$ in., 16 and 14 in. gauge respectively.
 Knuckles dropped forged screwed into threaded yokes with lock nut below.
 Differential Brown-Lipe Spur pattern, model 6, any size sprocket to 36 teeth.
 Bearings dust proof $\frac{1}{8}$ or $\frac{1}{4}$ in. balls in front, $\frac{3}{8}$ in. balls in the rear and keyed solid on rear axle, or with plain bearings if preferred.
 Wheels 28x2 $\frac{1}{2}$ in. with large barre hubs 4 $\frac{1}{4}$ in. center to center of flanges, nicked, and forty $\frac{1}{4}$ in. nicked Exeelsior spokes.
 Rims. Electrically welded and punched for 5 tire lugs.
 Spring blocks, two rear and one front, 30 in. between centers.
 Reaches 22 in. between centers.
 Weight 150 lbs. including wheels.
 Capacity 1,000 to 1,200 lbs.
 Track 4 ft. 4 or 4 ft. 8.
 Wheel base, choice 54 in. to 66 in.

Steering fittings, center pattern keyed to prevent possible slipping, and each connection fastened by $\frac{1}{2}$ in bolt nut and spring cotter.

NOTE.—Each telescoped joint at end of each rod is provided with an oiling device.

Price, nicked only.....	\$110 00	Price, side steering fittings, extra net.....	\$ 5 00
" enameled and striping.....	9 00	" Bend Brake, single acting.....	9 00
" 1 $\frac{1}{4}$ in springs, oil tempered, per set of three.....	7 00	" " double acting.....	12 00
" enameling springs and fittings to gear with spring clips.....	3 00	" with Sarven A Grade, wood wheels, painted to match gear and 1 $\frac{1}{4}$ in. solid rubber tires put on	35 00

We can supply 1 $\frac{1}{4}$ or 1 $\frac{1}{2}$ cushion tires on wire wheels if preferred, or we can supply solid rubber with steel channel rims on wire wheels.

Differential will be placed on one side if desired, 5 in. either side of center.

No. 2 S TUBULAR RUNNING GEAR.**For No. 2 S Outfit. Four Passengers.**

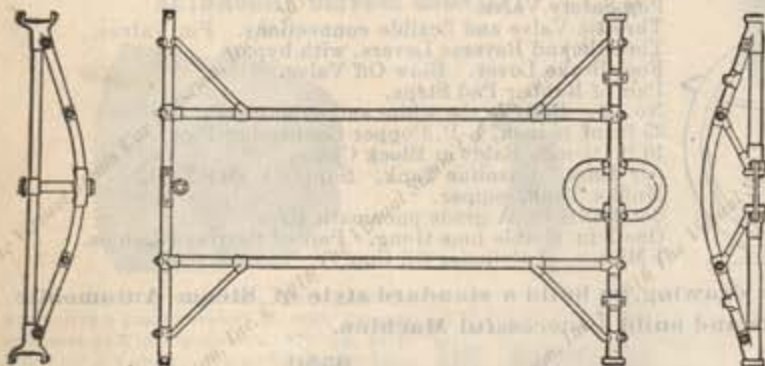
Same general specifications as Gear No. 18, except heavier throughout; Brown-Lipe Model One Differential; Rims, 28x3 in.; four Spring Blocks; Thread, 4 ft. 8 in. Price, advance over Gear No. 18, \$15.00. We will supply American Roller Bearings in wood wheels on above gear. Price on application. Differential will be placed on one side up to five inches from center if desired.

No. 3 S TUBULAR RUNNING GEAR.**For Delivery Wagons, Etc.**

This Running Gear is built especially for heavy weight surreys, or medium delivery wagons. It is constructed for heavy gauge seamless tubing, has the flexible features in reach rods, 3/4-in. balls in front hubs and differential and the rear axle made of 1 1/4 in. special steel. Standard size 4 ft. 8 in. 60-in. wheel base, but this will be changed without extra cost to 70-in. wheel base to match our delivery wagon body. The spokes are 6x8 in., Excelsior Needle Co., guaranteed to stand up under a weight of 2,500 lbs. Model One Brown Lipe Spur Gear with same capacity is used and the forged fittings are of uniform strength. Nickel plate is used only on the steering fittings, all other parts being enameled. Choice of side or center steering fittings.

PRICE, with rims for 4-in. pneumatic tires	\$135 00
" " " " with Sarven Wood Wheels and 1 1/2-in. guaranteed solid rubber tires	185 00
" " " " Roller Bearings instead of Balls	185 00
" " " " Sarven Wood Wheels and 1 1/2 in. solid rubber tires	215 00

Differential will be placed on one side or center as ordered.
Plain bearings will be substituted for ball bearings at the same price.



As shown in cut, pinned and braced ready to file and finish and all parts accurately machined and reamed ready for cups and steering knuckles.

Price..... \$40.00.

1 Rear Axle, 2 Pieces, steel in rough.

Price..... \$3.50.

Finished Rear Axle, with thread and key way cut.

Price..... \$9.00.

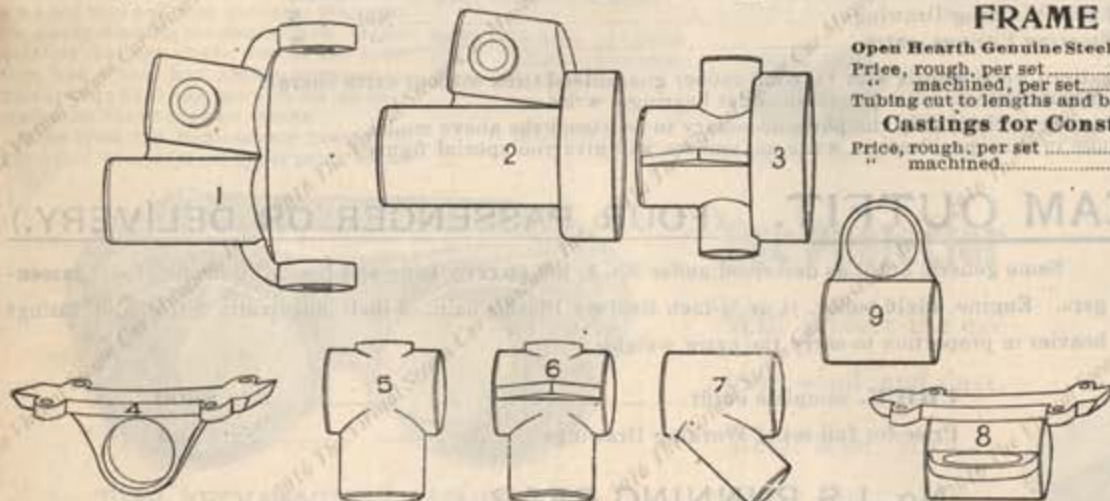
FRAME FITTINGS.

Open Hearth Genuine Steel Castings to Construct Gears 18.

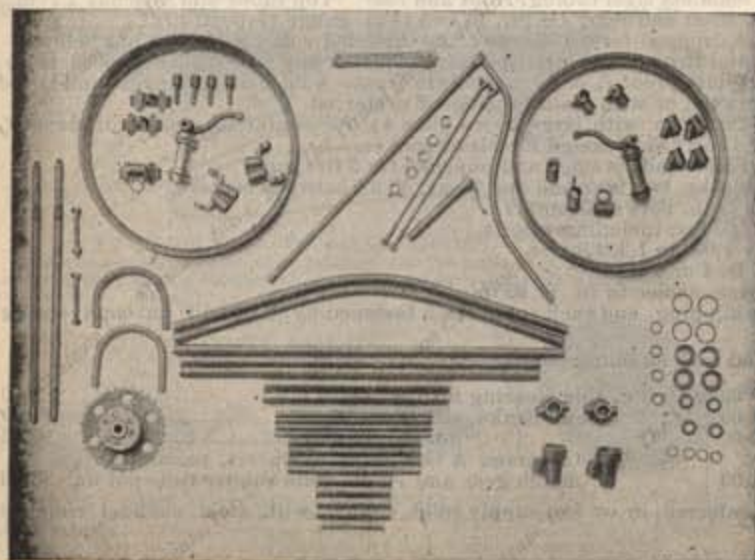
Price, rough, per set	\$ 9 00
" machined, per set	18 00
Tubing cut to lengths and bent	9 00

Castings for Constructing No. 28 Gear.

Price, rough, per set	\$14 00
" machined	22 00



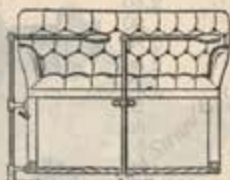
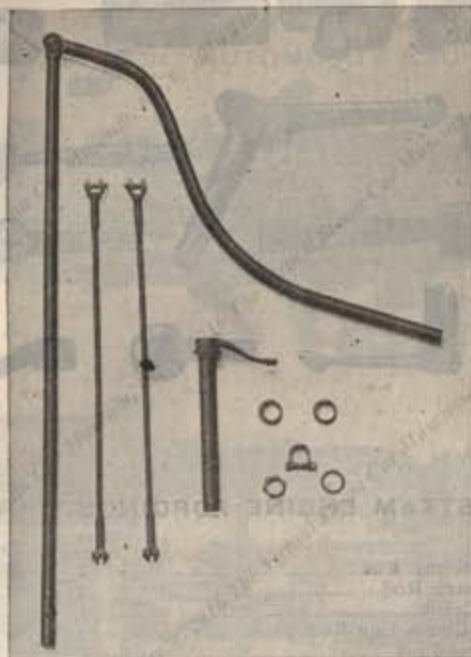
2-EACH No 1-2-3-4-5-6, — 4-No.7 — 1-EACH-No 8-9

**No. 1S****Semi Finished Combination.**

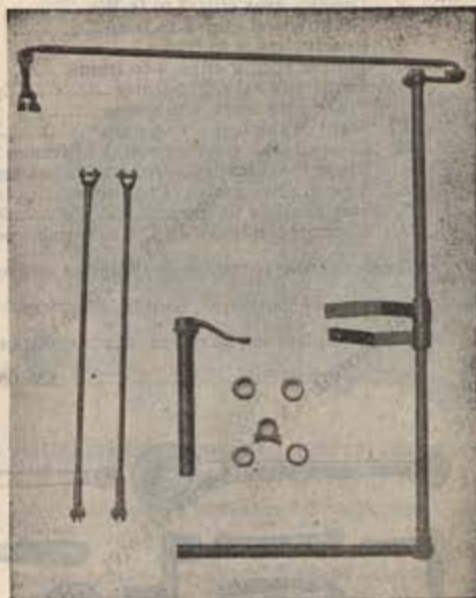
Cut shows our special set of Frame Fittings complete, ready for brazing; includes Ball Cups, Cones, Lock Nuts, Balls, Differential Steering Device, Back Axle, Steering Knuckles, and sufficient Tubing. This set is complete in every respect, and contains everything to construct a complete gear. Parts are accurately machined and ready to go together.

Price, all parts finished in the black..... \$85 00
" necessary parts nicked and finished..... 90 00

STEERING FITTINGS—Including Head Set, Nickeled.



Above shows two methods of using the side steering device.

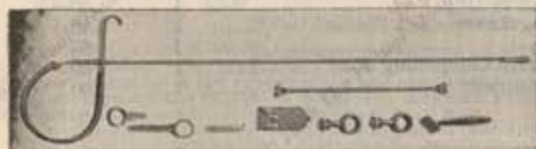


CENTER PATTERN.

Price, complete Set, center in black \$6 00
 " complete Set, nickeled 8 00

SIDE PATTERN.

Price, complete Set, side in black \$12 00
 " complete Set, side nickeled 15 00



SINGLE ACTING.

Price, as shown per set, \$9 00

BAND BRAKE FITTINGS



DOUBLE ACTING.

Price, as shown per set, \$14 00

Automobile Brakes and Breaks

The requirements of an Automobile Brake:

1. One that will stop the wheels of a vehicle instantly when necessary, or decrease the speed any amount desired.
2. One that can be operated effectively with little or no exertion.
3. One that will act equally effective when the carriage is moving in either direction.
4. One that does not bind nor cause any friction while released.



5. One that will hold a carriage stationary or stop it when moving backward down the steepest hill.
6. One that does not squeak when applied, nor rattle while released.

A TEST.—Will your brake hold your automobile still when full power is exerted in either direction? If not, you will do well to discard it and procure an AUTOBRAKE. It is nearly automatic—you furnish only enough power to tighten the band—it does its own gripping. Simple in construction, compact and looks neat on any carriage. Made of the best materials known, providing ample strength and wearing qualities. Easily applied to your carriage and does not mar it in any way. Guaranteed. Finished in Black Enamel... \$10 00 Finished in Full Nickel Plate... \$12 00

"THE DAYTON" BRAKE.

PATENT APPLIED FOR.



Grips uniformly throughout its entire circumference and holds equally well with the carriage moving in either direction.

Very simple in construction; neat in appearance; easily applied; free from toggles to get out of order and make a rattling noise; quick, efficient and reliable in operation. Operated by a single Cam Lever, which is the simplest, quickest and most powerful mechanical device for such a purpose.

	8 1/2 x 1 1/2 inch	8 1/2 x 2 inch	8 1/2 x 2 1/2 inch
Finished in Black Enamel.....	\$ 8 00	\$ 9 00	\$10 00
Finished in Full Nickel Plate....	10 00	11 00	12 00

FORGED FRAME FITTINGS

PRICE OF PARTS—ROUGH.

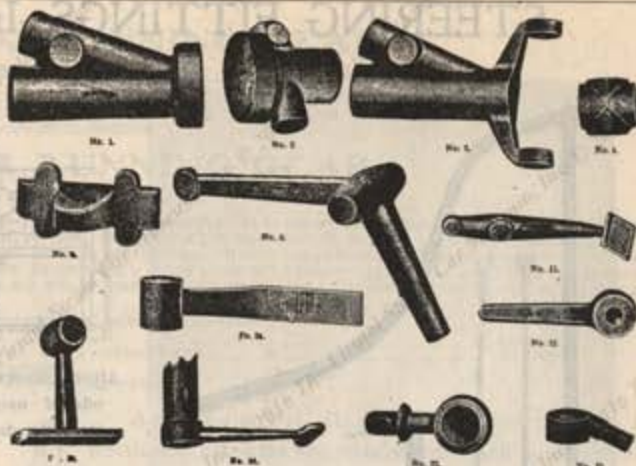
No. 1.	Rear wheel clip, 2 to frame.....	per pair, \$1.80
" 2.	Driving gear clip, 2 to frame.....	1.30
" 3.	Front wheel clip, 2 to frame.....	2.50
" 4.	Reach clips, 4 to frame.....	.80
" 5.	Bottom spring clips, 4 to frame.....	2.80
" 6.	Front hub axle, 2 to frame.....	2.50
" 11.	Brake foot lever, 1 to frame.....	.25
" 12.	Short brake lever, 1 to frame.....	each .25
" 33.	Lower brake steering rod, 1 to frame.....	.65
" 34.	Upper bracket for steering rod, 1 to frame.....	.65
" 35.	Steering head stem, 1 to frame.....	.85
" 37.	Step brace, 2 to frame.....	per pair .65
" 39.	Upper reach brace clip, 4 to frame.....	per set, 1.30

When ordering parts, specify number as given above.

If machined, double list prices.

For the complete set, 27 pieces, machined, ready for use.

Price\$35.00



STEAM ENGINE FORGINGS.

No.	To each Engine.	Each.
7.	Connecting Rod.....	2 \$0.50
8.	Eccentric Rod.....	2 .50
16.	Ball Crank.....	1 .30
17.	Link Connecting Rod.....	2 .30
18.	Reverse Link.....	2 .30
19.	Engine Crank.....	2 .90
20.	Eccentric.....	4 .30
21.	Engine Crank Shaft.....	1 .60
22.	Pump Lever.....	1 .30
23.	Cross Head.....	2 .60
24.	Pump Connecting Rod.....	1 .30
25.	Reversing Lever.....	1 .40
26.	Throttle.....	1 .85
27.	Hand Pump Connecting Rod.....	1 .30
36.	Engine Support.....	2 .60



FIG. K.

By-pass Throttle and Reverse Lever Set, complete like Figure K.

Brazed and filed\$9.80

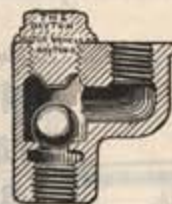
Finished and Nickeled10.60

GASOLINE
POCKET
TORCH.

BRASS NICKEL
PLATED
RESERVOIR.

5 in. high.
1 1/4 in. diameter.

Price\$3.00



No. 46. Ball Checks
Vertical, 72c



No. 47. Ball Checks
Horizontal, 72c



No. 45.
CYLINDER LUBRICATOR CUP.
3/8-inch.....\$1.40



WATER GLASSES.

6 inch.....20c
12 inch.....35c

FIG. E. 1/2 Size

Fig. E—Automatic Self-closing Water Gauge, particularly adapted for Automobiles. Complete with glass and shield, all highly polished in nickel.....\$3.00
Drain Cock, extra.....50c

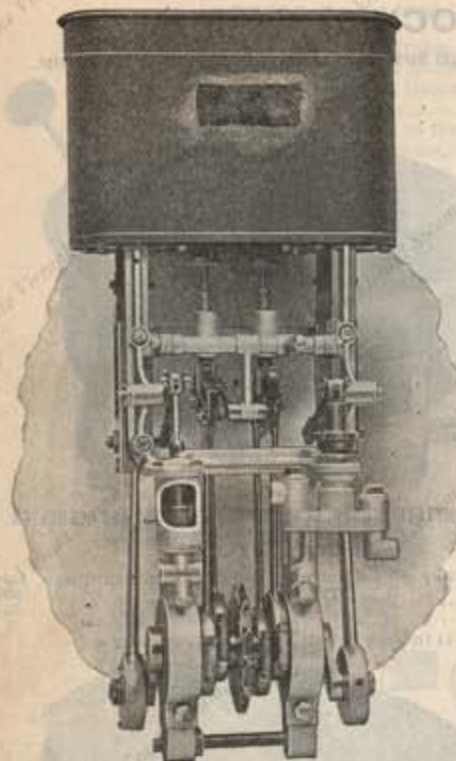
THE NEW KELLY GENERATOR.
ENTIRELY NEW IN CONSTRUCTION.

No smoke, no flashing or flaring in first lighting. Not necessary to use drip cup. Strong winds have no effect. Clean and quick in operation. All outside connections. Aluminum case over Generator. Gas orifice outside fully protected from wind. Strong, simple and powerful, with valve to control fire at seat.

Advancement and competition in the construction of Steam Carriages demand all parts for 1902 to be durable and effective, and any flimsy devices or experiments presented now cannot be accepted. Experience has put aside nearly all the first constructions in the Steam Motors, and parts must now be made for endurance and have unquestionable merit. All these we present in our new Generator for the first lighting and keeping up the sub-flame, always in readiness to turn on the main Burner. Our new Generator is small and very neat in appearance, but has a business-like look that only needs a trial to fully convince that it possesses all requirements to the highest degree. As we were the first to produce and present an Independent Generator with the valve at seat, together with our experience and constant experiments, fully warrants us in claiming in this new Generator a simple, powerful and durable attachment that will be welcome both to the maker and user of Steam Vehicles. (Our Generator is fully covered by patents and will be protected.) List price, as shown in cut.....\$25.00



THE AJAX STEAM ENGINES.



5 H. P.

Price \$100.00

10 H. P.

Price \$190.00

THE ABOVE PRICES INCLUDE PUMP.

The 5 H. P. Engine has cylinders $2\frac{1}{2} \times 3\frac{1}{2}$ in., all its working parts are made of dropped forged steel, case hardened. The crank shaft, crank pins and eccentrics have ball bearings and run absolutely smooth. The balls on the crank shaft are $\frac{1}{2}$ in., on the crank pins $\frac{3}{4}$ in., and on the eccentric $\frac{1}{4}$ in. The piston rods and valve stems are made of Tobin Bronze, which has besides being rust proof, the tensile strength of mild steel. The engine is fitted with a 12 tooth sprocket, 1 in. pitch for $\frac{3}{4}$ in. block chain. The wrist pins are hardened and then ground to a perfect fit, and are always interchangeable. The cross head end of connecting rod has hardened steel bushing, ground to a bearing which can be very easily replaced if necessary. The 10 H. P. Engine has cylinders $3\frac{1}{4} \times 4$ in. It has $\frac{5}{8}$ in. balls on crank shaft, $\frac{1}{2}$ in. balls on crank pins, and $\frac{3}{8}$ in. balls on eccentrics. This engine is fitted with 15 tooth sprocket, $\frac{1}{2}$ in. pitch for $\frac{3}{4}$ in. roller chain.

These engines we recommend to the trade as being the finest type introduced for automobile purposes. They have proved themselves a pronounced success, having maintained a speed of 1.15 in the recent eastern trial races, the fastest time ever made by a steam motor car, and came through without a flaw or strain.

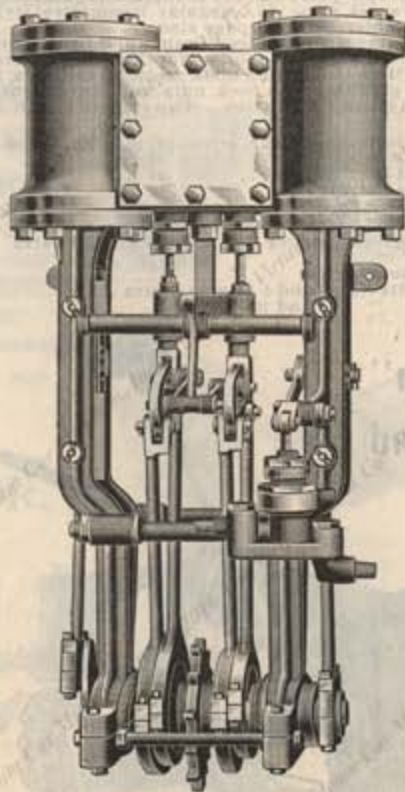
We can equip these engines with gasoline or fuel pump at an additional charge of \$10.00 each.

THE "STANDARD" STEAM AUTO ENGINE.

Especially adapted for the popular Runabout or Surrey type of Steam Carriage used on No. 1 S and 2 S Steam Outfits. Ball Bearing.

Direction.— $2\frac{1}{2}$ inch \times $3\frac{1}{2}$ inch cylinders, developing $4\frac{1}{2}$ H. P., made of best quality grey cast iron. The frame made wholly of composition gun metal. The connecting rods are steel made from drop forgings; the boxes are of bronze. Has V-shaped double slides each side of the crossheads. The two main bearings are wide and heavy, being $1\frac{1}{2}$ inches in breadth each side of the sprocket where the strain of the entire running gear of the carriage is encountered. The valves are fitted by being scraped to their seats and warranted to be tight. They are set to cut-off so as to use steam expansively. The pistons have double rings pinned in their places and are warranted to be tight. Packing boxes contain glands and the nuts are held by steel springs so as not to change their position. The small bearings and steel pins are hardened so as to secure the longest possible period of endurance and life to the bearings. The cylinders are provided with heavy asbestos jackets covered with cloth and painted. The engine is also provided with oil pockets which are very essential in a plain bearing engine running at high speed. Equipped with $\frac{3}{4}$ inch sprockets. Weight 40 pounds.

PRICE \$93.50



Thoroughly
Reliable.

Mechanism
Simple
and
Serviceable.

Regular
Locomotive
Style of
Link and
Valve.

COMPLETE SET OF CASTINGS OF STEAM ENGINES.

We will furnish the following parts at prices named Complete set of Castings for No. 18 Steam Engine as follows: Cylinders and steam chest with caps, covers and valves, 2 frames, 2 frame caps, 2 main rods, 4 eccentrics, 4 eccentric straps, 2 links, 2 rocker arm, 2 eccentric links, 1 valve stem guide and 2 cross heads, with blue print, \$25.00. Boring Cylinders and facing valves for same, \$16.00. Crank Axle (rough) for same, \$7.00. Turning and quartering crank axle for same, \$16.00.

Dayton Automatic Fuel Regulator—New Type.

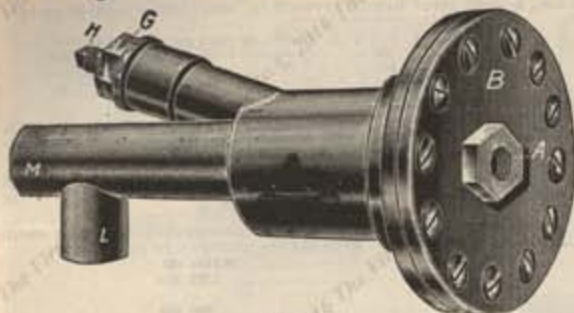


Fig. 1.

DESCRIPTION.

"The Dayton" Automatic Gasoline Regulator, herewith illustrated, is made in two styles as shown. In Fig. 1 the fuel is admitted at M and is discharged at L, and is controlled by a needle valve on the inside. Fig. 2 is the style used with the "Dayton" Generator in which the end of the Regulator (K) screws into the Pilot House within which the valve controlling the fuel is placed; in all other respects the construction of both is the same.

The head B is composed of two brass discs turned true and fastened together by accurately fitted steel screws, thus insuring an absolutely tight joint. Between these two discs is placed a diaphragm made of the best spring metal. This head is screwed onto the body of the Regulator and can be removed for examining the spring and valve stem without disturbing the diaphragm.

The body E of the Regulator is made of brass and is bored out to receive a steel thimble in which the steel compression spring D is placed. This compression spring is confined beneath the button head C in which the valve stem J terminates, and is compressed to the desired tension by the stud H which passes through the packing gland G. There is no packing around the valve stem J anywhere, consequently it is always free to move under the slightest change in pressure.

Unless otherwise instructed, we set the compression spring D so that combined with 40 pounds of air pressure in the gasoline tank it will balance a boiler pressure of 200 pounds per square inch, and every Regulator is subjected to a working test, and its accuracy proved before shipment.

OPERATION.

Connect the Regulator with the steam boiler at A and provide a valve in the steam pipe so the Regulator can be cut out at the will of the operator in case he desires temporarily to carry a higher steam pressure than the Regulator is set for. In connecting Fig. 2 with the fuel supply care must be taken to have the pressure from the gasoline tank enter the shank of the Regulator back of the needle valve, so it can pass through the channel occupied by the valve stem, and press against the diaphragm in the head. Fig. 1 is so constructed.

When the steam pressure in the boiler exceeds the amount for which the regulator is set, it overcomes the pressure exerted by the compression spring and the gasoline or air pressure combined and presses the metal diaphragm against the button head C and its attached stem J, thus closing the needle valve and shutting off the fuel. As quick as the steam pressure in the boiler falls below the desired amount the above action is reversed, and the fuel turned on. As there is no packing or other frictional resistance to the free movement of the valve stem J, it follows that the regulator can and will automatically maintain the desired boiler pressure, a result, the importance of which will be appreciated by every intelligent user of a steam carriage, and which cannot be obtained with any regulator the valve stem of which passes through a packing gland.

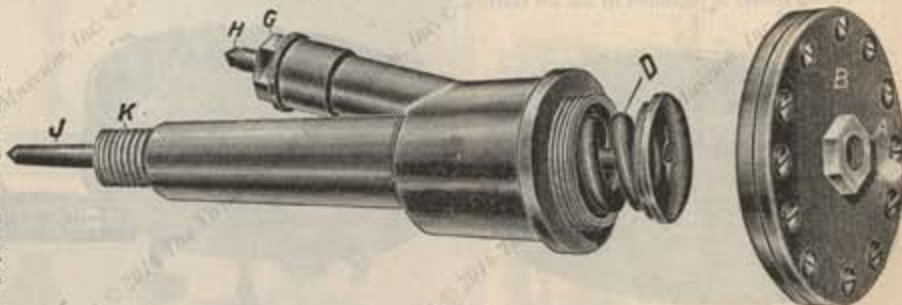


Fig. 2.

ADVANTAGES.

We claim for our New "Dayton" Regulator all the good points found in any of the other regulators of the same type now in use, and the following points of advantage over any other:

1. "The Dayton" is the only Gasoline Regulator the head of which is screwed onto the body, thus giving quick and easy access to the valve, valve stem and tension spring, without taking apart the head or disturbing the diaphragm.

2. "The Dayton" is the only Gasoline Regulator of this type in which the valve stem is not surrounded by a packing gland and is left perfectly free to respond to the slightest variation, and can therefore be depended upon to continuously maintain a uniform boiler pressure.

THE DAYTON REGULATOR, LIST PRICE, EACH \$6.00.

"The Dayton" Lever Throttle Valve and Flexible Double Joint Connection.

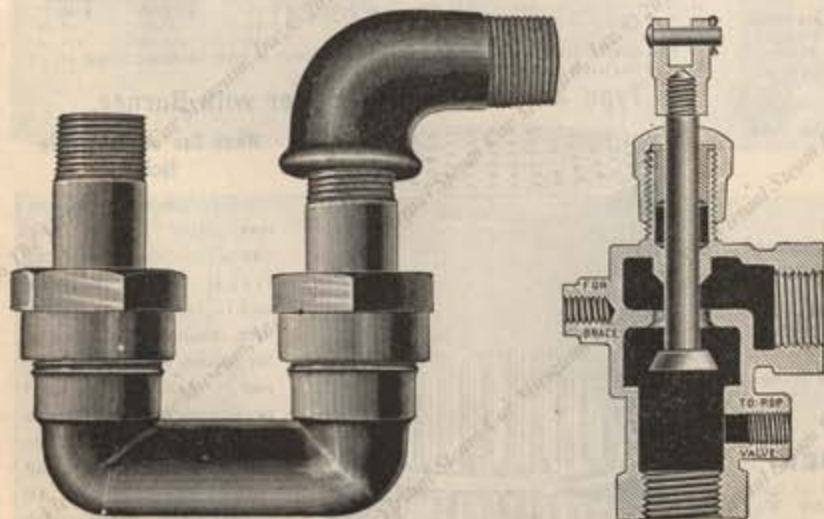


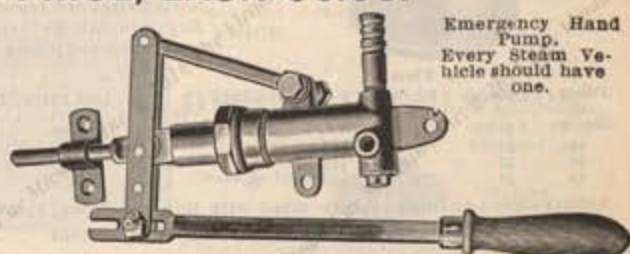
Fig. 1.

Fig. 2.

Fig. 1—Flexible Double Joint Return Bend for connecting Throttle Valve to Engine. Brass, $\frac{1}{2}$ in., \$5.00. Brass, $\frac{3}{4}$ in., \$6.50.

Fig. 2—"The Dayton" Lever Throttle Valve, Packing Gland Provided. Brass, $\frac{1}{2}$ in., \$3.00. Brass, $\frac{3}{4}$ in., \$3.00. Brass, $\frac{1}{2}$ in., \$3.50.

Throttle Valve and Flexible Double Joint Connection, like Fig. 1. $\frac{1}{2}$ in., \$8.00. $\frac{3}{4}$ in., \$10.00.



The Hand Pump fastens to frame of bed and will fill a boiler in two or three minutes.

Price \$8.00.



THE LOCKE PUMP. \$6.00.

STEAM BOILERS FOR AUTOMOBILES.**OUR "STANDARD" STEAM BOILERS—Steel.**

With Drawn Bottoms.

DESCRIPTION.—Steel shell 3-16 in. thick, no seam, 3-16 in. steel heads, riveted in, steel tubes 1/2 in. 20 gauge expanded and spun in reamed holes (not punched).

12x14, 240 1/2 in. Flues, 20 Gauge	\$ 65 00	16x14, 360 1/2 in. Flues, 20 Gauge	\$ 89 00
14x12, 300 " " "	74 00	16x16, 360 " " "	95 00
14x14, 300 " " "	78 00	18x14, 480 " " "	140 00
16x12, 360 " " "	85 00	18x16, 480 " " "	150 00

LARGER SIZES SPECIAL.

The above boilers are tested to 600 lbs. C. W. have fusible safety plugs and are fully guaranteed. If with copper tubes add 5c. list, per tube for 12 in.; 6 1/2c per tube, list, for 14 in., and 6c per tube, list, for 16 in. lengths.

EXTRA TUBES.Steel Tubes, 1/2x20 in. flanged at one end price per foot, \$0 09
Copper Tubes, 1/2x20 in. flanged at one end 15**COPPER BOILERS.**Standard pattern. Made of seamless copper shell, heads and rings made of best grade of boiler steel 3-16 in. thick, securely riveted to shell with 1/4 in. x 3/4 in. rivets. Heads drilled and reamed for 300 1/2 in. 20 gauge copper tubes. Carefully wound with three layers of 20 gauge piano wire.
12x14 Price complete, with jacket and safety plug, 300 tubes \$100 00
13x16 360 tubes 125 00**EXTRA TUBE.**

\$0 09

15

Tubes, 1/2x20 in., steel.
Extra Tubes, 1/2x20 in., copper, flanged at one end.
A 16x14 Boiler is included in No. 1 S Outfit.

A 16x16 Boiler is included in No. 2 S Outfit.



LOCKE.



LOCKE.

The Locke Combination Burner, Generator and Regulator.

Complete, as shown above, 14 in.	\$37 50
" " " " 16 in.	40 00
" " " " 18 in., choice	
of Bug or Kelly Generators	45 00
Burners only, 18 in.	25 00
" " 20 in.	30 00
" " 22 in.	37 50
" " 24 in.	45 00



FORGE BURNER.

14 inch	114 Tubes	\$17 00
16 "	150 "	22 00
18 "	194 "	27 00



Top View.

Diam. of Boiler.	Length of Tubes.	No. of Half Tubes.	Total Wt.	Heating Surface, sq. ft.	Horse Power.	List Price Steel Flues.	List Price Copper Flues.
14	13	309	117	43	3 1/2	\$75 00	\$80 00
16	13	429	149	60	5	80 00	87 50
18	13	576	179	88	8	114 00	125 00

Boilers shown on this page are fitted with Hanging Irons, Fusible Plug, and tapped for Water and Steam Connections

THE UNIVERSAL TRUCK BOILER.

Our 24-inch Boiler gives 16 2-3 horse power and weighs 600 lbs. It has 1,000 1/2-inch tubes 18 inches long. The shell is of 5-16 stock and 20 inches high. The two heads are riveted in. We make this boiler with either steel or copper tubes, and with dry plate or without, as specified. This Boiler is fitted with heavy hanging irons, tapped for steam or water and highly tested. List Price, \$3.50 each.

Our 24-inch Boiler, with tubes 22 inches long, gives 20 horse power. List price, \$3.00 each.

BOILER TUBE CLEANER.

All Boiler Flues must be cleaned of soot occasionally. Fits Locomotives and Motor Buses and all steam autos that have 1/2 inch flues. No. 1. Heavy bristles. 85c. No. 2. Brass Wire, \$1.10.

BOILER COMPOUND.

Will remove all scale and grease from the boiler. One teaspoonful per week will keep a boiler which is used continuously free from scale.

Price, \$2.00 per quart.

THE DRY PLATE BOILER.

The Advantages are as follows:—The dry plate between the flanges prevents foaming. It would be impossible for water to get into the steam space above the dry plate. All of the tubes pass through this plate. There are enough small holes through the plate to allow the steam generated to pass into steam space above it. This dry plate is placed above the water line. As we keep the water separated from the steam, by means of said plate, the tube service above the dry plate acts as a superheater; this is very desirable on steam carriages, for when superheated steam is used, there is very little fog visible at exhaust pipe from engine. Dry steam means great economy.

The shells are seamless and the heads are a part of the shell. There are no seams or rivets near the fire. There is but one seam, and this acts as an expansion joint. As the tubes in all internally-fired boilers expand before the outer shell, this expansion joint takes care of the difference in expansion between the tubes and shell; this joint also strengthens the boiler.

The steam carriage boiler is the one to use as it gives absolutely dry steam, and is strong and safe.

Diam. of Boiler.	Length of Tubes.	No. of Half Tubes.	Total Wt.	Heating Surface, sq. ft.	Horse Power.	List Price Steel Flues.	List Price Copper Flues.
14 in.	13 in.	309	112 lbs.	43 3-10	3 6-10	\$75 00	\$80 00
16 "	13 "	420	140 "	59 1/2	4 9-10	80 00	87 50
18 "	13 "	576	165 "	88	7 3-10	114 00	125 00

The above sizes are regular stock, and orders can be filled from stock. We can furnish any size boiler wanted.

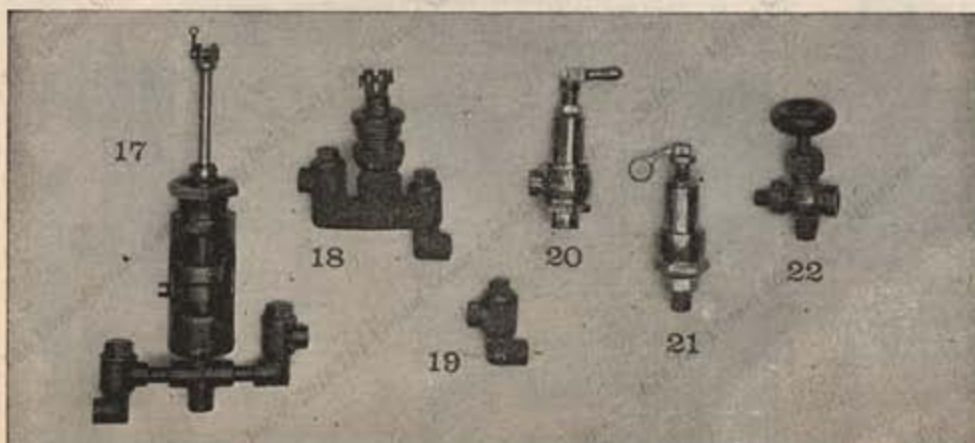
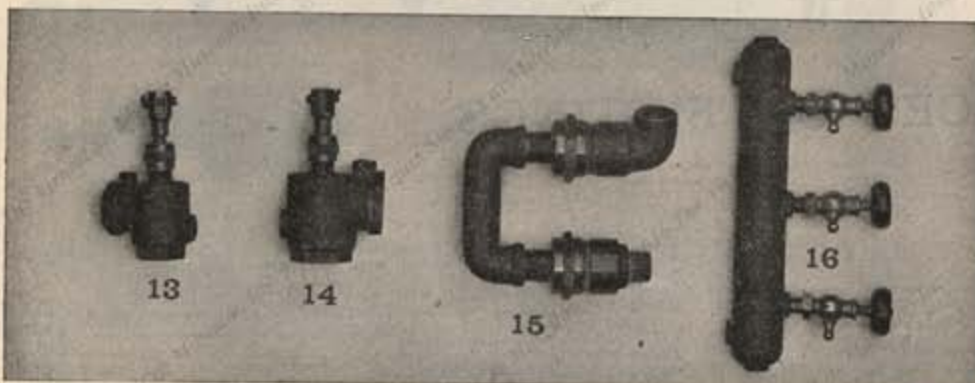
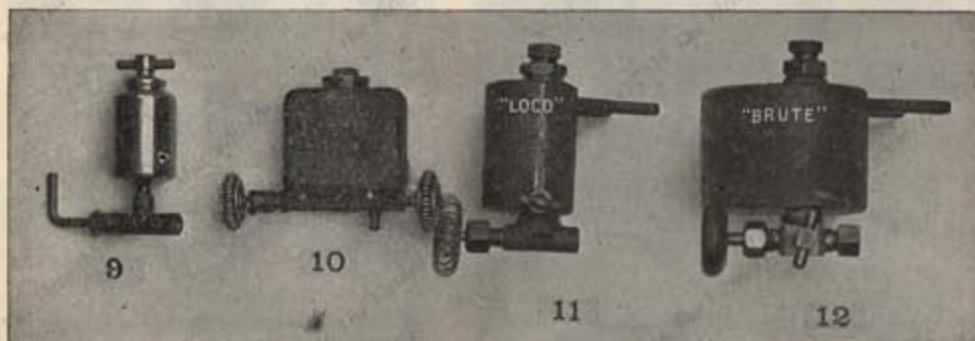
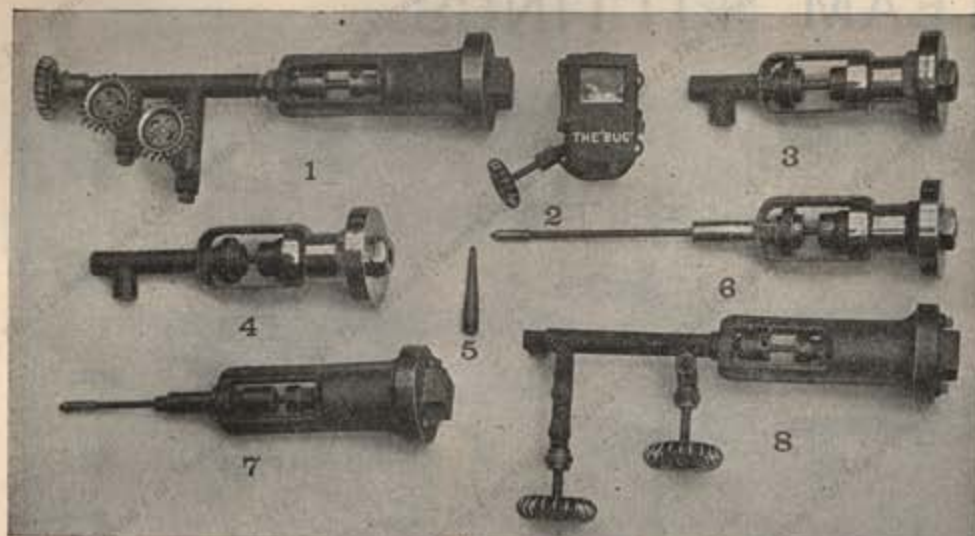
Type X—Automobile Boiler with Burner.

Which Can be Readily Detached.

Boilers are made of seamless, Cold Drawn Steel Shells in the following sizes (inside measurement): 14, 16, 17, 19 and 20 inch diameter, and can be furnished with either copper or steel tubing, or if preferred, we can furnish without tubing, but with 1/2 inch holes drilled and reamed (64 threads). All boilers are fitted with hanging irons.

List price of Boilers with burners attached:

14 in. with 750 half-inch copper tubes	\$125 00
16 " " 356 " " "	150 00
17 " " 406 " " "	165 00
18 " " 418 " " "	205 00
19 " " 492 " " "	225 00

STEAM FITTINGSFOR PRICES
SEE PAGE 48

PLEASE ORDER BY NUMBER AND PAGE.



The
RELIANCE
LOW
WATER
ALARM.

Safe, Sure,
Successful.



Length, 7 1/2 inches
Diameter, 3 1/2 inches
Weight, 4 pounds

Price, Low Water
Alarm, \$15 00

Price, Water
Gauge, \$1 50

**ACME STEAM THROTTLE.**

SAFE, ECONOMICAL AND
DURABLE.

Warranted not to leak. Any
amount of steam desired can be
admitted to the engine, and valve
will remain in any position with-
out being held by operator.

PRICE..... \$6 50

**THE CURTIS
BOILER FEED REGULATOR.**

Holds the level of the water in the boiler
within one-quarter of an inch variation by
controlling the suction, the by-pass, or the
steam pipe of the pump.

PRICE..... \$

OFELDT REGULATORS.

Have No Packing

Boxes to Leak

PRICE..... \$5.50



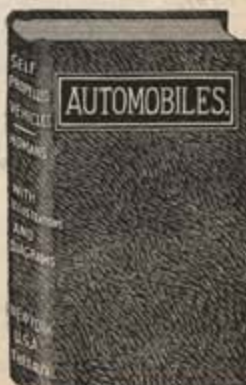
Patented 1901

Weight,

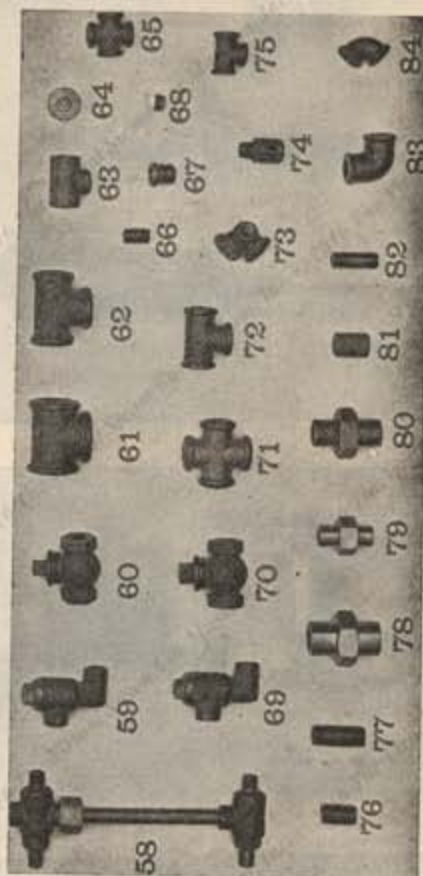
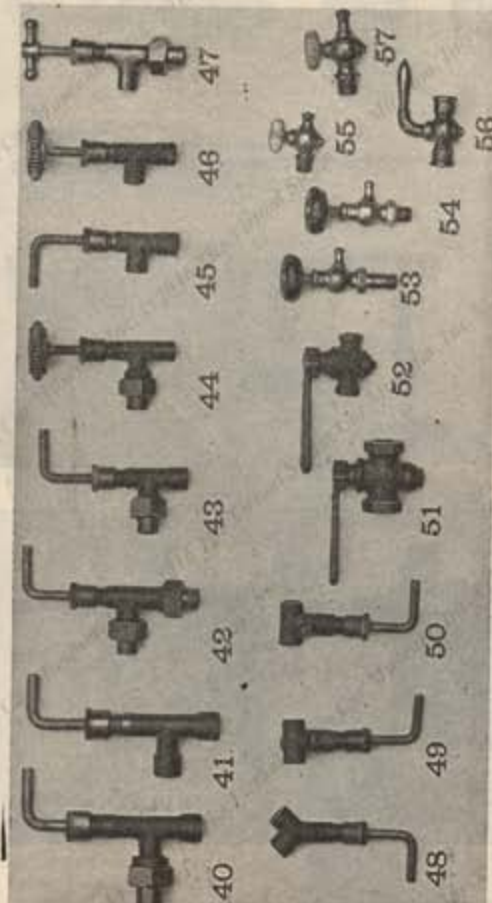
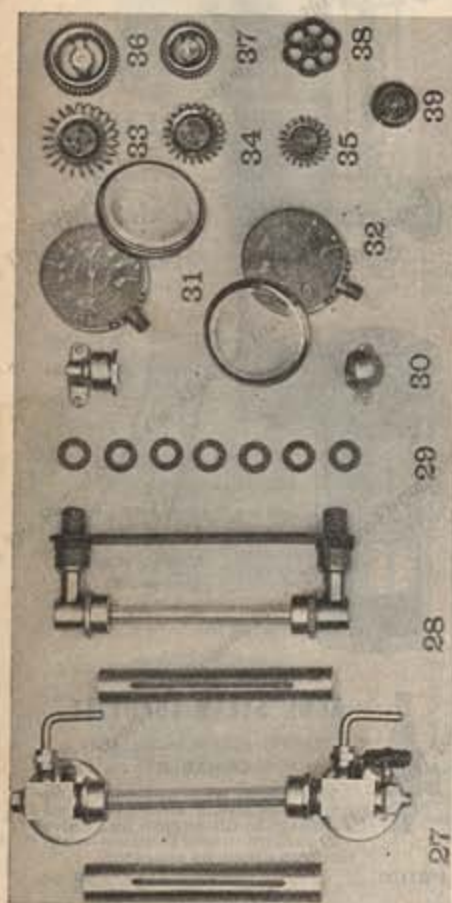
2 lbs.

Most accurate fuel regulating device ever
invented. Will positively regulate within
two pounds. Diaphragm acts directly on
fuel valve. SIMPLE and SENSITIVE. We
guarantee satisfaction.

OVER 600 PAGES.
FULLY ILLUSTRATED
The Finest Publication Out
Price, \$5.00



STEAM FITTINGS.

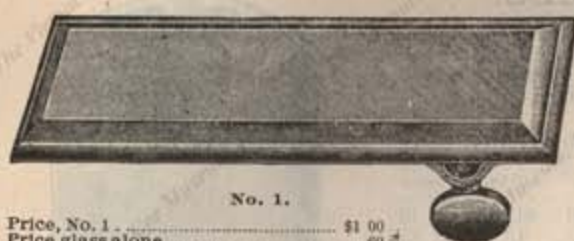


PRICES ON FITTINGS,

No.	Description	Price
1.	Beats All Regulator and Jet Valves combined.	\$11 00
2.	The Bug Generator.	15 00
3.	Beats All Regulator, short nose.	5 00
4.	Beats All Regulator, long nose.	5 00
5.	Burner Jets.	each, 25
6.	Beats All Long Stem Generator.	5 00
7.	Beats All Short Stem Generator.	5 00
8.	Beats All with Jet Valve combined. This style is adapted especially for Bug Generator and old torch style.	11 00
9.	Plain Blind Oiler.	1 75
10.	Condensed Cylinder Oiler, improved, will feed an engine for 30 miles.	3 00
11.	Loco Oiler, holds enough to feed an engine for 30 miles.	4 50
12.	Our Famous Brute Oiler, will feed an engine 100 miles.	7 50
13.	Throttle Valve, 1/2 inch, absolutely steam tight.	2 00
14.	Throttle Valve, 3/4 inch, absolutely steam tight.	3 00
15.	Throttle Valve and Flexible Swing Joint, 1/2 in.	6 50
16.	Throttle Valve and Flexible Swing Joint, 3/4 in.	7 50
17.	Swing Joint, without throttle, 1/2 in.	3 50
18.	Water Column, complete, with nickle plated gauge cocks.	4 00
19.	Engine Cross-Head Fuel Pump.	5 00
20.	Engine Cross-Head Water Pump.	5 00
21.	1/2 in. Check Valve.	5 00
22.	Safety or Pop Valve, set at any pressure ordered.	1 00
23.	Safety Valve, plain tapped, for both 1/2 and 3/4 in. connections.	2 00
24.	Barclay Automatic Gauge Valves.	2 00
25.	Automatic Safety Glass Gauge, shuts off escape of steam when glass breaks.	3 00
26.	Plain Glass Gauge.	6 00
27.	Rubber Gauge Packing.	8 00
28.	Tank Gauge, 12 in., to show height of water in tank, complete, with glass, etc.	4 00
29.	Air Gauge, 100 lb.	2 00
30.	Steam Gauge, 100 lb.	2 50
31 to 37.	Wire Wheels.	2 50
38.	Iron Wheel.	20
39.	Wood Wheel.	15
40.	Needle or Pin Valve, one union, 1/2 in.	08
41.	Needle or Pin Valve, plain, 1/2 in.	70
42.	Needle or Pin Valve, two unions, 1/2 in.	85

No.	Description	Price
43.	Needle or Pin Valve, one union, 3/4 in.	\$0 45
44.	Needle or Pin Valve, one union, with wire wheel handle.	55
45.	Needle or Pin Valve, plain.	25
46.	Needle or Pin Valve, plain, with wire wheel handle.	40
47.	Needle or Pin Valve, one union, designed for gasoline carriages, highly polished.	1 50
48.	Y-Shaped Pin Valve Drip, 1/2 in.	60
49.	Three-way Pin Valve Drip, 1/2 in.	70
50.	Straight-way Pin Valve Drip, 1/2 in.	80
51.	Steam Cock, 1/2 in., iron handle.	40
52.	Steam Cock, 3/4 in., iron handle.	50
53.	Try Cock, long shank, nickle plated.	45
54.	Try Cock, plain.	40
55.	Air Cock, 1/2 in.	40
56.	Steam Gauge, female.	65
57.	Air Cock, 1/2 in.	50
58.	Cylinder Relief Valves.	per pair, 1 25
59.	Check Valve, 1/2 in.	50
60.	Check Valve, 3/4 in., horizontal.	50
61.	T, 1/2 in.	80
62.	T, 3/4 in.	25
63.	Reducing T, 1/2 x 3/4 x 1/2 in.	25
64.	Cross, 1/2 in.	20
65.	Close Nipple, 1/2 in.	10
66.	Bushing, 1/2 x 3/4 in.	12
67.	Plug, 1/2 in.	08
68.	Check Valve, 1/2 in.	50
69.	Check Valve, 3/4 in., horizontal.	50
70.	Cross, 1/2 in.	25
71.	T, 1/2 in.	20
72.	Three-way Elbow.	80
73.	Boiler Nipple.	60
74.	T, 1/2 in.	10
75.	Close Nipple, 1/2 in.	12
76.	Space Nipple, 1/2 in.	17
77.	Union, 1/2 in.	35
78.	Union, 3/4 in.	25
79.	Union, 1/2 in.	30
80.	Coupling, 1/2 in.	08
81.	Space Nipple, 1/2 in.	08
82.	Elbow, 1/2 in.	10
83.	Elbow, 3/4 in.	12
84.	Elbow, 1/2 in.	10

STEAM CAR SUPPLIES AND SPECIALTIES.



Price, No. 1. \$1 00
Price glass alone. 60
Price No. 2—Double Mirror. 75



No. 2.



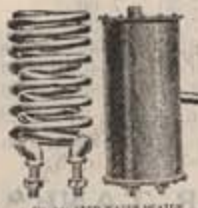
ROLLER TUBE EXPANDER. \$3.75.

SAFETY FUSIBLE PLUG. Tapped 1/4 inch. \$1 00



Fig. 101. AUTOMOBILE STEAM GAUGE. Fig. 102. AUTOMOBILE AIR GAUGE. These Gauges are made with Solid Drawn Tubes. Valves Guaranteed Not to Stick on their Seats. Price, Fig. 101, \$1.00; Fig. 102, 75c. Fig. 103, 1.00 to 1.50. Fig. 104, 1.00 to 1.50.

FEED WATER HEATER.



Not absolutely necessary but a great fuel saver, and makes steaming easier.

Price \$15.00

COMBINED BOILER AND AIR PUMP.



List Price, \$40.

As shown in the half-section, the general design is same as in single pump, only in that the pump end is made double, plunger with rods outside and packed on water side and enlarged piston on air side. This plunger and used for boiler feeding and the enlarged piston for air.

DIMENSIONS.

Cylinder measure of machine 4 inches high, 4 inches wide, 10 inches long.

Size. Diameter of steam cylinder, 2 inches. Diameter of water pump, 3/4 inch. Diameter of air plunger, 1 1/2 inches. Stroke, 1 1/4 inches.

Capacity.

Water at 20 strokes per minute, 40 gallons per hour. Air at 20 strokes per minute, 15 gallons free air per hour. These figures are based on 30 feet travel, although the machine is capable of a very much higher speed.

Test.

These air pumps are tested to put up from 80 to 100 pounds compressed air in 2 1/2 gallon tank in 2 1/2 minutes, under 200 pounds steam.

The water pump is tested as to leaks, valves, and to pump against its own steam pressure.

Caution.

It should be understood by the user that it is necessary to run constantly. The air pump is more efficient when handling cold air; constant running causes the air cylinder to heat.

If pressure can be arranged it is desired to the end that either air or water can be utilized by the operator, although we consider the use of the single water pump and the double air pump more advantageous in operating under varying conditions and circumstances.

Single Boiler Feed, List price, each, \$20. Double Boiler Feed and Air, List price, each, \$40. Single Air Pump, List price, each, \$20.

VICTOR STEAM PUMPS.

Patented May 6, 1903. Air Pump.

Space required in design 3 inches in length by 3 inches in diameter. Weight 4 1/2 lbs. Steam and air cylinder 1 1/2 in. in diameter, 1 1/2 in. stroke.

The pump is designed to pump a pressure of not to exceed 40 lbs. on the feed tank or line, and to pump this pressure in a receiver and a half, with a boiler pressure of 125 to 150 lbs.

List Price, \$21.

Water Pump.

Space required in design 3 inches in length by 3 inches in diameter. Weight 4 1/2 lbs. Steam and air cylinder 1 1/2 in. in diameter, 1 1/2 in. stroke.

The pump is designed to pump a pressure of not to exceed 40 lbs. on the feed tank or line, and to pump this pressure in a receiver and a half, with a boiler pressure of 125 to 150 lbs.

List Price, \$21.

Water Pump.

Space required in design 3 inches in length by 3 inches in diameter. Weight 4 1/2 lbs. Steam and air cylinder 1 1/2 in. in diameter, 1 1/2 in. stroke.

The pump is designed to pump a pressure of not to exceed 40 lbs. on the feed tank or line, and to pump this pressure in a receiver and a half, with a boiler pressure of 125 to 150 lbs.

List Price, \$21.

Water Pump.

Space required in design 3 inches in length by 3 inches in diameter. Weight 4 1/2 lbs. Steam and air cylinder 1 1/2 in. in diameter, 1 1/2 in. stroke.

The pump is designed to pump a pressure of not to exceed 40 lbs. on the feed tank or line, and to pump this pressure in a receiver and a half, with a boiler pressure of 125 to 150 lbs.

List Price, \$21.

Water Pump.

Space required in design 3 inches in length by 3 inches in diameter. Weight 4 1/2 lbs. Steam and air cylinder 1 1/2 in. in diameter, 1 1/2 in. stroke.

The pump is designed to pump a pressure of not to exceed 40 lbs. on the feed tank or line, and to pump this pressure in a receiver and a half, with a boiler pressure of 125 to 150 lbs.

List Price, \$21.

Water Pump.

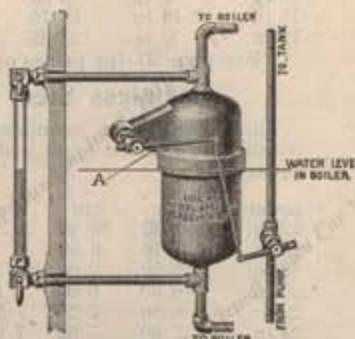
Space required in design 3 inches in length by 3 inches in diameter. Weight 4 1/2 lbs. Steam and air cylinder 1 1/2 in. in diameter, 1 1/2 in. stroke.

The pump is designed to pump a pressure of not to exceed 40 lbs. on the feed tank or line, and to pump this pressure in a receiver and a half, with a boiler pressure of 125 to 150 lbs.

List Price, \$21.



Our Standard Injector.



STEAM PACKING KIT, \$1.50.

No. 1. Piston Rod Packing. No. 2. Valve Rod Packing. No. 3. Valve Steam Packing (Steam). No. 4. Valve Steam Packing (Gasoline). No. 5. Marvel Gauge Glass Packing.

PRICE \$1.50 PER BOX.

PISTON AND VALVE ROD PACKING.

Spiral Form.

No. 1. Piston Rod Packing.

No. 2. Valve Rod Packing.

No. 3. Valve Steam Packing.

No. 4. Valve Steam Packing.

No. 5. Marvel Gauge Glass Packing.

1 lb. packages, \$5.55 per lb.

VALVE STEM PACKING.

No. 4.

No. 4. List price

1 lb. package

\$5.50 per lb.

VALVE STEM PACKING.

No. 3.

List Price, per lb.

package, \$1.50

OUR Standard Injector.

This INJECTOR has been used and tried for Auto use and found a complete and reliable boiler feed. Made of composition throughout.

1/4 inch connection for steam.

1/4 inch connection for water.

Price, \$8 50

THE LOCKE AUTOMATIC

WATER LEVEL REGULATOR.

LATOR.

Relieves the operator of the anxiety of watching the mirror, and reduces the liability of burning out the boiler. It is 4 in. wide, 9 inches high; weight complete 9 pounds.

Price, each \$14.00

SELF PACKING RINGS

Sizes 1/4, 3/8, 1/2 inch, per doz. 45c

RING FORM.

No. 1 Piston Rod Packing, per lb., \$5.55.



No. 1.



No. 2.



No. 2.

No. 2 Valve Rod Packing,

Per lb., \$5.55.

Pop Safety Valve.

Style C can be regulated to blow off at any pressure.

\$2.50.

Style D—With connection so that the steam can be discharged into muffler or water tank.

\$3.50.

KITT'S LOW WATER ALARM.

We use a solid gravity weight unaffected by steam pressure, and not a hollow ball float.



Alarm is made of brass, weight 8 pounds, is 7 inches long by 1 1/4 inches diameter and is tested with 300 pounds cold water pressure to square inch.

Price, Alarm complete, with whistles, tees, unions, cross, blow-off, valve and piping sufficient to attach to boiler, \$15.00

NOTICE—We do not furnish try cocks with this Alarm unless specially ordered.



Moore Independent Automobile Boiler Feed Pump for Steam Vehicles. Single Plunger Air Pump. Single Plunger Boiler Feed. Combination Air and Boiler Feed. GUARANTEED.

AUTOMOBILE BOILER PUMP—Single.

We want you to Pump till the Boiler runs dry.

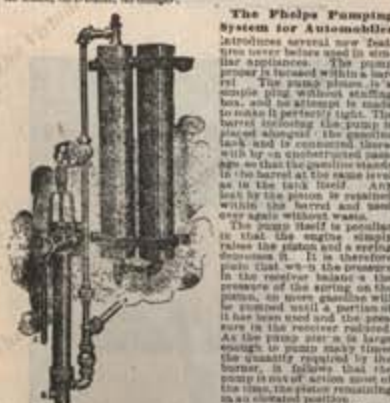


List Price, \$20.

The above unit represents a single plunger steam pump. Size, 4 inch steam, 3 1/2 inch air, 1 1/2 inch stroke. Dimensions, 4 x 4 x 13 1/2 inches long. Weight, 11 pounds, 13 ounces. Capacity at 20 strokes per minute: 4 1/2 inch plunger, 17 gallons per hour. 3 1/2 inch plunger, 12 gallons per hour. 2 1/2 inch plunger, 8 gallons per hour. Piston speed, variable. Speed can be regulated agreeable to requirements from 50 to 200 single strokes. Location.—Can be located inside or on the side, or right side up at an angle, agreeable to conditions. Water and adjusted to work satisfactorily.

PHELPS GASOLINE PUMP FOR AUTOMOBILES.

Readily attached to any steam vehicle. Only one pint of gasoline under pressure at any time. Pumps what fuel is required—no more, no less. Operates any desired pressure automatically. No top-pipe or overflow valve to clog or clog. No stuffing box to leak. No secondary gasoline pump required. No air pump necessary. No hose, no pump, no waste, no trouble, no danger.



List Price, \$25.

The Phelps Pumping System for Automobiles

Introduces several new fuel

type never before used in similar

appliances. The pump

pressure is increased within a

second. The pump is

simple, giving without stuffing

box, and no attempt is made

to make it perfect. The

barrel, enclosing the pump is

placed around the gasoline

and is connected thereto

with a rubber hose, so that

the gasoline stands in the

barrel at the same level as

in the tank itself. Any

loss by the piston is replaced

within the barrel and used

over again without waste.

The pump itself is so

designed that the engine

raises the piston and a

spring returns it. It is

therefore simple. The

piston, as soon as it

is raised, the pressure in

the receiver is raised.

As the pump piston is

raised, the piston

remains in an

adjusted position.

Still another feature is

retained under pressure, and from which fuel is fed to the burner.

Introducing in the receiver, where a small quantity of gasoline is

retained under pressure, and from which fuel is fed to the burner.

STEEL BOILER SHELLS.

The strongest, lightest, neatest and best boiler shell in the world. The shells have bottom drawn with shell in one, and are recommended as not only the most popular (being used by nearly every automobile maker of note), but the best on the market for the purpose.

Price List of Boiler Shells and Loose Heads.

Internal Diam.	Thickness of Wall.	Length of Shell.				Price of Loose Heads.
		12 in.	14 in.	16 in.	18 in.	20 in.
12 in.	.150 in.	\$ 8 70	\$ 9 15	\$ 9 90	\$10 80	\$12 00
14 in.	3-16 in.	10 80	10 95	12 00	12 60	13 20
16 in.	3-16 in.	12 75	13 35	13 80	14 25	14 85
16 in.	1/4 in.	16 95	17 70	18 45	19 05	20 25
18 in.	3-16 in.	18 75	19 32	19 80	19 97	20 97
19 in.	1/4 in.	23 25	24 25	24 97	26 30	27 75

See page 37 for prices on Boiler Tubes.

Seamless Steel Tanks for Gasoline, Etc.

These tanks are seamless throughout, heavily tinned inside and outside, and tested to an hydraulic pressure of over 300 pounds per square inch.

Length.	Internal Diameter.							
	6 in.	7 in.	8 in.	9 in.	10 in.	12 in.	14 in.	16 in.
12 in.	\$6 30	\$6 40						
15 in.	6 40	6 50						
18 in.	6 50	6 60	\$6 70	\$6 80	\$7 00	\$7 20		
20 in.	6 60	6 90	7 10	7 20	7 30	7 60		
22 in.	6 80	7 25	7 50	7 60	7 70	8 00		
24 in.	7 00	7 60	7 90	8 00	8 10	8 40	\$10 00	
28 in.	7 80	8 40	8 70	8 80	9 00	9 40	11 20	
30 in.	8 40	8 80	9 00	9 20	9 40	9 80	11 80	\$15 00

The most popular sizes are 8 in., 10 in., 22 in., 24 in., 28 in.

Gasoline Tanks, generally 8 in. x 24.; Air Tanks, 9 in. x 15 in.

—1/8 in. Tap; Mufflers, 5 x 9—1/4 or 1 in. Tap.

WATER TANKS.

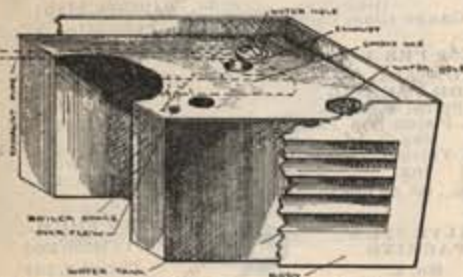
This style Water Tank is supplied with our outfits on page 40. It not only economizes space and allows of greater capacity, but accommodates the boiler in the recessed part, thereby tending to heat the water before passing into the boiler.

WATER STORAGE TANKS.

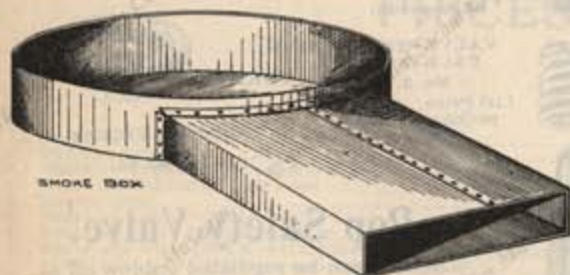
Made to fit the body, as per illustration on page 40.

Galvanized Iron, size 25x20x12 inches.....	each, \$10 00 list.
" " " 30x25x12 " " " " " "	" 12 00 "
" " " 30x25x14 " " " " " "	" 14 00 "

For Copper Tanks advance 40 per cent. list. The sizes are approximate only. We make these Tanks any size to fit inside the body.



Hoods and Smoke Domes.



Made to fit our Boilers.

Price, each, 14 in. and 16 in.....	\$6 50
" " 17 in. to 20 in.....	8 50

COPPER AIR AND GASOLINE TANKS.

Complete, with In and Out Openings.

7x12 inches.....	each, \$5 00
9x12 " ".....	" 5 00
9x24 " ".....	" 7 50
6x24 " ".....	" 6 00
9x28 " ".....	" 8 00
8x25 " ".....	" 7 50
9x12 " ".....	" 7 00

As we manufacture these Tanks, we can make them any size desired. The above conveying approximately the prices.

BOILER JACKETS.

Made of galvanized Iron, 1 inch larger than the diameter of boiler to allow for asbestos packing, and projecting several inches top and bottom.

Each.....\$2.50



INDEX.

A

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Mr. Donald, Pres. of Chicago Auto Club, says—

The wheel steering device received promptly, and was readily adjusted to my machine and performs its functions accurately and most satisfactorily, etc.

F. C. DONALD.

Everything I have purchased from you has pleased me beyond expectation. I have a great automobile and you can refer anyone to me you desire, etc.

STUART DARROW,
OWEGO, N. Y.

The Caruretter works fine have shown it to gasoline engine experts, and they are well pleased. Enter my order for, etc.

D. M. JONES,
MANITOU, COLO.

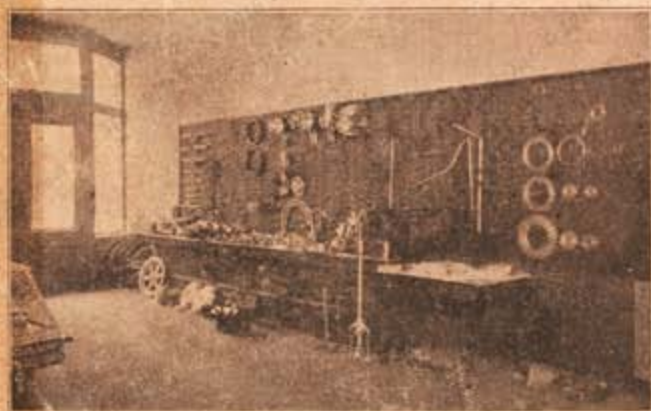
FLINT, MICH., May 4, 1901.
MR. A. L. DYKE, St. Louis.

DEAR SIR:—I write to say that the Outfit No. 2, which I got from you last January is running right along, and works like a charm—no mishaps whatever, and I am well pleased, etc., etc.

H. H. BARDWELL, M. D.
Office, 107 First Street.
Residence 715 Harrison Street.

The material received and find it entirely satisfactory.

J. PIETSCH, SAN JUAN, PORTO RICO.



We are just in receipt of material ordered by cablegram and find same entirely satisfactory in every respect, etc.

J. S. WHITE, CHELTENHAM, ENGLAND.

DEAR SIR:—Your favor at hand in regard to A. L. Dyke Outfit, which I have used all this season in all kinds of roads. It is a first-class machine in every respect, goes, hill climber and speedy on level roads, and at same time a very stylish rig. I have the No. 1 Outfit with S. H. P. Engine. I have found Mr. Dyke reliable and prompt in dealings. I just got home from a trip with my auto, made about 300 miles and not a mishap, over a good many rough roads.

Beaver Dam Gas and Gasoline Engine Works.

Yours truly,
H. E. HASS, Mgr.



A. L. DYKE, St. Louis.

WAUKON, IA., April 8, 1901.

DEAR SIR:—We have thoroughly examined and tested the S. H. P. engine which I got from you recently. We find it first class, and it is without doubt the most perfectly constructed engine we ever saw. Please hurry up another one like it, etc., etc.

J. S. JOHNSON.

Proprietor Waukon Foundry and Machine Shops.

Your No. 1 Outfit is superior to anything I have seen.

C. L. TURNER,
PEORIA HEIGHTS, ILL.

My machine made from your No. 1 Outfit is satisfactory have seen nothing for which I would exchange.

DR. P. J. POTHUISJE,
REMINGTON, IND.

The No. 3 Outfit has been made up into an elegant Touring Car and is a fine machine. Will send you photo soon.

W. T. HARRINGTON,
ST. LOUIS, MICH.

SARNIA, ONT., April 22, 1901.
A. L. DYKE, ESQ., St. Louis.

DEAR SIR:—I have tested the Caruretter and find it most satisfactory. It does not require nearly as much gasoline as others I have used and does not corrode the sparking plug, etc., etc.

I am truly yours,
THOS. DOHERTY,
(Doherty Mfg. Co.)



MR. A. L. DYKE, St. Louis.

FORT SMITH, ARK., Sept. 27, 1901.

DEAR SIR:—Please send me at once, 1 set rear bearings for No. 1 running gear. The S. H. P. Engine which I purchased from you runs just fine. It is without a doubt the finest engine I ever saw, etc.

GUS BOEHMER, Automobiles, Bicycles, etc.

MR. A. L. DYKE, St. Louis.

SPOKANE, WASHINGTON, October 5, 1901.

DEAR SIR:—Having used the Automobile purchased of you, for several weeks, I wish to express to you my perfect satisfaction with you, way of doing business. The machine is everything claimed for it, and I don't see how it can be improved very much. Now I would like prices on etc., etc.

Very truly yours,
E. D. OLMSTED, M. D.

We Carry a Full Line of First Class 2nd Hand Automobiles.
SEND FOR BULLETIN.