WARWICK
Cycles and Automobiles

1901

Cycle and Automobile Co.
ngfield, Mass., U.S.A.

The Warwick Automobile

WEIGHT: from 600 to 650 pounds MOTIVE POWER: Gasoline
SPEED: from 4 to 25 miles per hour
PRICE: with 3½ H. P., $850; 5 H. P., $950 Additional with leather top, $100

M A N U F A C T U R E D B Y

The Warwick Cycle & Automobile Co

SPRINGFIELD MASSACHUSETTS U S A

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WARWICK AUTOMOBILES

ITH the building of bicycles nothing could be more in order than that *Automobiles* should be made in the same factory. The skill required to perfect a bicycle, making it strong, light and graceful, can be used to good advantage in building Motor Carriages. The bicycle builder knows how to eliminate weight without sacrificing strength, and we believe that no other class of manufacturers can compete with the bicycle builder in making vehicles for pleasure or business that will be as graceful and strong as those who have catered to the wants of the public in making first-class bicycles.

A year's experiment has brought out the Warwick Automobile that has many new and valuable features, among which are strength in comparison to weight, beauty of design and finish, compactness and convenience in handling, improved method of steering, improved transmission including clutches and reverse, and other improvements that will be mentioned later.

We invite examination and criticism, believing that by this we shall make friends for our automobiles as we have already for our bicycles.

In producing the Warwick Motor Carriage, several features have been sought and attained, among which are lightness of construction, combined with strength ; ease of handling ; compactness and convenience in getting to all the working parts ; beauty of design ; anti-vibration and easy riding.

The running gear is made of steel tubing, heavy gauge, and of the most modern method of flush joints, with a new construction at the front to compensate for uneven surfaces in the road. This is an important feature. The rear is made solid, the axles passing through tubes connecting the wheels with differential gears. The wheels are of the steel spoke laced pattern and 30 inches in diameter.

The steering device is unique and effective, made with sprockets and chain, connecting with the steering-post at the top of which is a handle that will remain in position, even with hands off, with no danger of getting away with the chaffeur, even when using both hands to put on gloves or to catch the hat when lifted by a sudden gust of wind. The steering is very easy, requiring much less than the usual effort but with absolute safety.

The methods for connecting the current (which, by the way, can not be done without a suitable plug that can be carried in the pocket), the regulating of the vapor (gasoline and air), the pet cock connecting with cylinder to allow of the injection of cold air when required, and the lever to regulate the speed of the motor, are all under the right hand and can be regulated readily while the carriage is in motion and with the steering hand. This leaves the left hand free to operate the clutch and reverse levers, to change speeds, and back the carriage when required.

The brake is of the band brake pattern and operated by the foot.

One of the most disagreeable features of the gasoline engine is the usual way of starting. In the Warwick a great improvement has been made. Firstly, the old method of starting with a crank can be used but is never necessary ; second, the motor can be started by the foot before entering the carriage ; third, lastly and by far the best, by the hand while seated in the carriage. This is done by means of a

lever that stands near the dasher, which you pull gently, causing the motor to revolve, after which you move the clutch in position with the same hand, and the carriage starts. A patent has been allowed on this device.

The engine used is either a three and one-half or five horse power. The transmission gear is arranged for two speeds, giving a range of from six to twenty-five miles per hour, according to the speed of the motor. This also contains a reverse. The transmission has two powerful clutches, simple in construction and very durable. These are operated by a lever in connection with ball bearing devices, and so constructed that there is no end thrust on the shaft. The reverse is strong and effective, and all placed in an alluminum case.

There are also many other new features. The muffler, for which a patent has been applied for, is a new Warwick invention and effectually kills the usual noise caused by explosion of vapor in the engine, and is so constructed that it relieves the usual back pressure. The body is of the stanhope pattern, Warwick design, and very stylish. A new feature of the body is a device for holding the back cover in position, either up or down, for which a patent has been applied for. By this means any part of the carriage can be exposed in a moment.

The driver sits on the left side, thus being in the best possible position to avoid collisions when passing other vehicles.

The tops used on these carriages are made of the best leather, the upholstery of the best woolen goods, unless leather is preferred, and all in keeping with the attractive style of body.

Points of Advantage Over Other Carriages

To summarize, some of the main points of advantage in our carriage over others are as follows :

First : Absolutely no vibration experienced by the rider.

Second : A perfectly noiseless muffler.

Third : A starting device that is operated by the driver from the seat of the carriage and with perfect ease.

Fourth : A perfectly safe steering device, making accidents from carelessness in steering almost impossible.

Fifth : Great strength of construction without unnecessary weight.

Sixth : Ease of learning to operate.

Seventh : Compactness and simplicity.

Eighth : Beauty of style and finish.

The three objections urged against gasoline carriages, viz : Vibration, noise and cumbersome weight have been entirely overcome in the Warwick.

WARWICK BICYCLES

IN presenting our second edition for 1901, we need to say only a few words, as the great demand for Warwick catalogues speaks for itself. We have added Model 87 since our first edition was published, which proved a favorite from the start. Like the Model 40 of ancient fame, it is unique and first in its class. It is made of one-inch tubing, and while it is really a racer, it is strong enough for a heavy man on heavy roads. The light road wheel, made of one and one-eighth inch tubing, is also light and easy running. The rigid and Cushion-Frame Chainless wheels are works of art and have many new features. The men's roadster, chain wheel, at a lower price, meets with ready sale and is fully warranted. Last, and by no means least, are the ladies' wheels, the running mates of all of the above-mentioned styles.

Model 81 Cushion Frame Bevel Gear Chainless

Model 81 C. L. 5-inch Head; 21-inch Frame
Model 81 C. H. 7-inch Head; 23-inch Frame

Equipment, Price $75.00

WHEEL base, 42 inches; drop, 2 inches; single-piece cranks, 6½ or 7 inches long; tread, 5 inches; nickle steel tubing, 1⅛ inches in diameter; all flush joints; rear stays, ovaled and tapered; finish, black or vermilion; fork crown square; spokes, 36 or 40 in rear wheel, 32 in front wheel; handle-bars, adjustable and reversible, with interior fastenings; seat-post with interior fastenings; pedals, rat-trap or combination; gears, Leland & Faulconer, 72, 81 and 91; tires, Hartford, Goodrich, Palmer, Fisk or Dunlop; saddles, Sager, Persons or Troxel.

COASTER BRAKE $5.00 ADDITIONAL

Model 81 Bevel Gear Chainless

Model 81 L. 5-inch Head; 21-inch Frame
Model 81 H. 7-inch Head; 23-inch Frame

Equipment, Price $75.00

WHEEL base 42 inches; drop, 2½ inches; single piece cranks, 6½ or 7 inches long; tread, 5 inches; nickel steel tubing, 1⅛ inches in diameter, all flush joints; rear stays ovaled and tapered; finish, black or vermilion; fork crown, either square or arched; spokes, 40 in rear wheel, 32 in front wheel; handle-bars, adjustable and reversible, with interior fastenings; pedals, rat-trap or combination; gears, Leland & Faulconer, 72, 81 or 91; tires, Hartford, Fisk, Goodrich, Palmer or Dunlop; saddles, Sager, Persons or Troxel.

COASTER BRAKE $5.00 ADDITIONAL

Model 82 Bevel Gear Chainless

Model 82 L. 7-inch Head; 21-inch Frame
Model 82 H. 7-inch Head; 23-inch Frame

Equipment, Price $75.00

WHEEL base, 42 inches; cranks, 6½ inches long; drop, 2½ inches; tread, 5 inches; rear stays ovaled and tapered; finish, black, finely striped; fork crown, square; spokes, 36 or 40 in rear wheel, 32 in front wheel; handle-bars, adjustable and reversible, with interior fastenings; seat-post with interior fastenings; pedals, combination; gears, 66 or 72; tires, Hartford, Fisk, Goodrich, Palmer or Dunlop; saddles, Sager, Persons or Troxel.

COASTER BRAKE $5.00 ADDITIONAL

Model 87 Racer

Model 87 L. 5-inch Head; 21-inch Frame

Equipment, Price $50.00

WHEEL base, 41 inches; drop, 2¾ inches; single-piece cranks, 6½ or 7 inches; tread, 4⅜ inches; tubing, nickel steel, 1 inch in diameter; all flush joints; rear forks and stays ovaled and tapered; finish, vermilion or black; fork crown, square; spokes 36 in rear wheel, 32 in front wheel; pedals, rat-trap; handle-bars, adjustable and reversible with interior fastenings; seat-posts, with interior fastenings; gears, from 70 to 121; tires, Hartford, Fisk, Goodrich, Palmer or Dunlop; saddles, Sager, Persons or Troxel; chain, ⅛-inch, best nickel steel.

Model 83 Road Racer

Model 83 L. 5-inch Head; 21-inch Frame
Model 83 H. 7-inch Head; 23-inch Frame

Equipment, Price $50.00

WHEEL base, 41 inches; drop, 2¾ inches; single-piece cranks, 6½ or 7 inches long; tread, 4⅜ inches; tubing, nickel steel, 1⅛ inches in diameter; all flush joints; rear forks and stays, ovaled and tapered; finish, black or vermilion; fork crown, square; spokes, 36 in rear wheel, 32 in front wheel; pedals, rat-trap or combination; handle-bars, adjustable and reversible, with interior fastenings; seat-post with interior fastenings; gears, from 68 to 100; tires, Hartford, Fisk, Goodrich, Palmer or Dunlop; saddles, Sager, Persons or Troxel; chain, polished with chamfered links.

COASTER BRAKE $5.00 ADDITIONAL

Model 84 Woman's Wheel

Two heights of frame, 21-inch and 23-inch, both 7-inch heads. Equipment and price same as Model 83.

Model 85 Road Wheel

Model 85 L. 5-inch Head; 21-inch Frame
Model 85 H. 7-inch Head; 23-inch Frame

Equipment, Price $35.00

WHEEL base, 42 inches; tread 4½ inches; cranks 6½ and 7 inches long tubing, 1⅛ inches in diameter; all flush joints; drop to hanger, 2¾ inches; rear forks and stays, ovaled and tapered; finish, black, striped; fork crown, either square or arched; spokes in wheels, 32; handle-bars, adjustable and reversible, with interior fastenings; seat-post, L, with interior fastenings; gears from 68 to 100; tires, Fisk, guaranteed; saddles, Wheeler, Sager or Elyria; chain, polished.

COASTER BRAKE $5.00 ADDITIONAL

Model 86 Woman's Wheel

Two heights of frame, 21-inch and 23-inch, both 7-inch heads. Equipment and price same as Model 85.

All machines have the usual guarantee.

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