

CATALOGUE 1891

OUR MOTTO

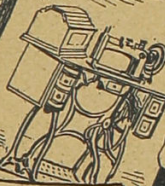
BEST ON EARTH

BICYCLES



SEWING

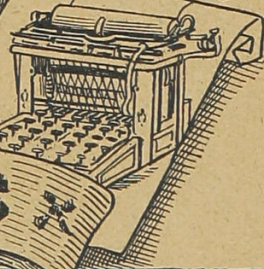
MACHINES



& TYPE

WRITERS

Forus Daily
J. E. Poorman



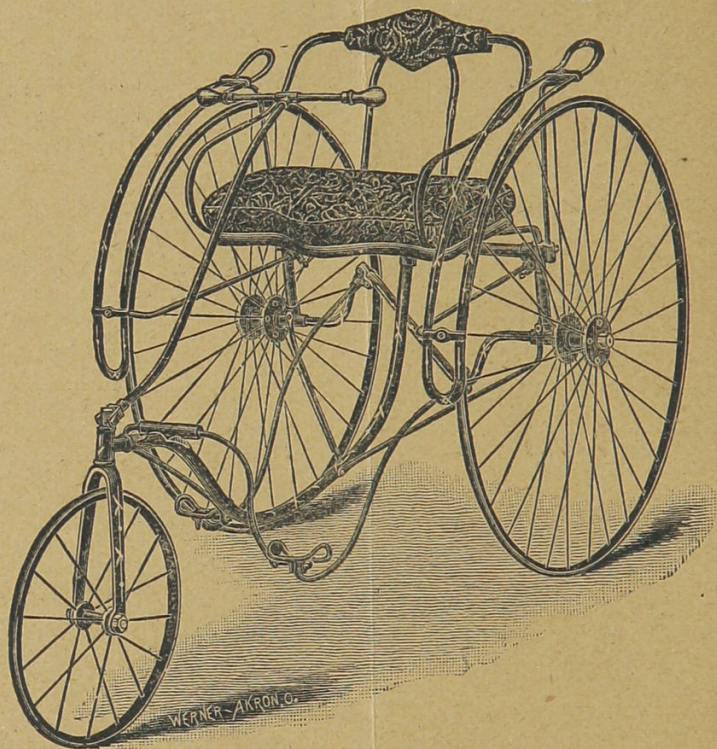
J. E. POORMAN. AGT.

EIGHTH & RACE STS.

CINCINNATI, O.

Any wheel shipped C. O. D., subject to examination, on receipt of \$5.00 to guarantee express charges.

Children's Tricycles.



PRICE LIST WITHOUT WHEEL FENDERS.

WITH OVAL IRON TIRE WHEELS.

- No. 1—22-inch wheel (for girls from 4 to 7 years of age).....\$10 00
No. 2—26-inch wheel (for girls from 7 to 10 years of age)..... 12 00
No. 3—30-inch wheel (for girls from 10 to 13 years of age)..... 14 00

WITH RUBBER TIRE.

- No. 6—22-inch wheel (for girls from 4 to 7 years of age).....\$17 00
No. 7—26-inch wheel (for girls from 7 to 10 years of age)..... 19 00
No. 8—30-inch wheel (for girls from 10 to 13 years of age) 21 00

The Fenders add \$3.00 to the List Price.

Repairing of all kinds promptly done. Work guaranteed.

Any wheel shipped C. O. D., subject to examination, on receipt of \$5.00 to guarantee express charges.

GREETING!

WE WANT

To put you in the way of the purest, healthiest, and most satisfactory form of exercise known: one that can be taken by both sexes, by children, the young and the aged, with less expense and more benefit to mind and body than any other pastime—to a practical, easy, and swift mode of traveling.

WE WANT

The attention of the trade to our large and well-selected stock of bicycles and tricycles suitable to all ages, purposes, and purses; full particulars of which will be found on the succeeding pages of this Catalogue.

WE WANT

To emphasize to all that our business principles are:

Honest Goods and Lowest Prices.

Liberal Dealings with Everybody.

Every Article as Represented.

We are Always Abreast of the Times.

Your Interest is Our Own.

Wishing you every success and prosperity in the new year, 1891 we are,

Very respectfully,

J. E. POORMAN.

Repairing of all kinds promptly done. Work guaranteed.



WARWICK COMBINATION SAFETY

PRICE, - - - \$135.00.

The WARWICK COMBINATION SAFETY is built practically on the same lines which, for the past three years, have made it the most popular Combination Safety on the market.

It has 30-inch wheels, geared to 54, tangent spokes, hollow rims, specially constructed cushion tires, dust-proof ball bearings, long centered ball-bearing steering head, improved saddle, and gracefully curved handle bars of ample width.

The frame is the well known WARWICK PERFECTION, consisting of two tubes of cold drawn steel tubing, which run parallel from the head to the rear axle in one piece. Finished in black enamel and nickel plate. Weight, all on, 50 pounds.

“BUILT ON HONOR.”

Used by the United States Government in the
Postal Service.

Repairing of all kinds promptly done. Work guaranteed.



WARWICK DIAMOND SAFETY

PRICE, - - - \$135.00.

The WARWICK DIAMOND SAFETY is built to meet the growing demand for a high-grade light-weight safety of American manufacture. The machine has the Diamond frame, which admits of more strength with less weight than any other.

The machine has 28-inch driving and 30-inch steering wheels, geared to 56, tangent spokes, especially constructed cushion tires, fitted to WARWICK PERFECTION hollow rims, hollow forks, dust-proof ball bearings, long centered ball-bearing steering head, diamond frame of cold drawn steel tubing, improved saddle, and gracefully curved handle bars. Finished in black enamel and nickel plate. Weight, all on, 42 pounds.

“BUILT ON HONOR.”

**Used by the United States Government in the
Postal Service.**

Repairing of all kinds promptly done. Work guaranteed.



WARWICK LADIES' SAFETY

PRICE, - - - \$135.00.

The WARWICK LADIES' SAFETY is beyond all doubt as handsome a ladies' wheel as any on the market. It is *light, easy running and graceful*.

The machine has 28-inch driving and 30-inch steering wheels, geared to 52, tangent spokes, especially constructed cushion tires, fitted to WARWICK PERFECTION hollow rims, dust-proof ball bearings, long centered ball-bearing steering head, a gracefully curved loop frame, which gives ample room for the arrangement of the dress; nicely curved handle bars, within easy reach of the rider. The saddle is especially designed for the use of ladies, and we think will prove itself the most comfortable saddle manufactured. It is finished in black enamel and nickel plate, and weighs, all on, 40 pounds.

“BUILT ON HONOR.”

Used by the United States Government in the
Postal Service.

Repairing of all kinds promptly done. Work guaranteed.

Any wheel shipped C. O. D., subject to examination, on receipt of \$5.00 to guarantee express charges.

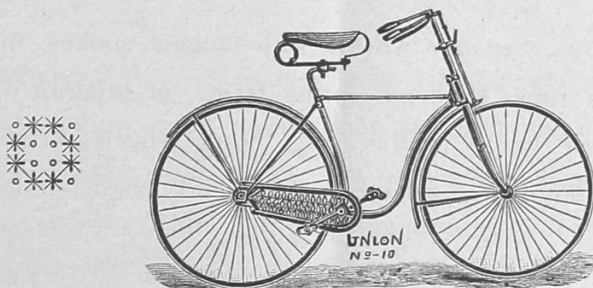
UNION No. 9.



PRICE, \$115.00.

SPECIFICATIONS.—Front wheel, 30 inches; rear wheel, 31 inches; crescent rim, direct spokes, $\frac{7}{8}$ -inch rubber tires, ball bearings to wheels, crank axle and pedals. Finely finished.

UNION No. 10.



PRICE, \$115.00.

SPECIFICATIONS.—Same as No. 9, excepting the loop instead of cross frame, which makes it desirable for either lady or gentleman.

Repairing of all kinds promptly done. Work guaranteed.

Any wheel shipped C. O. D., subject to examination, on receipt of \$5.00 to guarantee express charges.

UNION No. 12.



PRICE, \$135.00.

SPECIFICATIONS.—30-inch wheels, with tangent spokes, nicked to lacing; hollow rims; Diamond spring frame, of superior weldless steel tubing; rear brake; ball bearing head, wheels, crank axle and pedals; patented adjustable saddle and chain adjustment. Weight, 44 lbs.

Repairing of all kinds promptly done. Work guaranteed.

Any wheel shipped C. O. D., subject to examination, on receipt of \$5.00 to guarantee express charges.

UNION No. 13.

FOR LADIES.

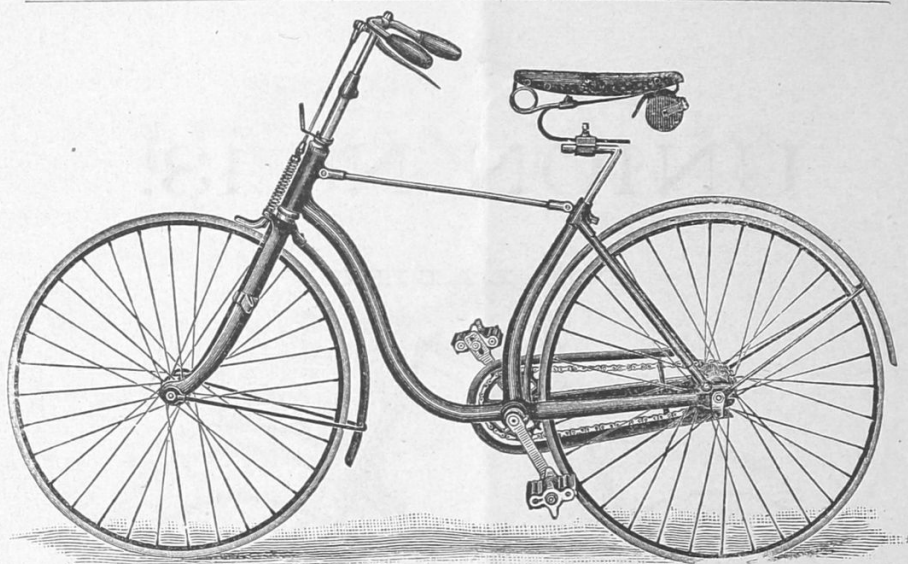


PRICE, \$135.00.

SPECIFICATIONS.—28-inch wheels, with tangent spokes, nicked to lacing; hollow rims; double loop spring frame, of superior weldless steel tubing; rear brake; ball bearings to head, wheels, crank axle and pedals; chain and wheel thoroughly covered with dress guards. Weight, 40 lbs.

Repairing of all kinds promptly done. Work guaranteed.

Any wheel shipped C. O. D., subject to examination, on receipt of \$5.00 to guarantee express charges.



PRINCESS SAFETY No. 1.

30-INCH.

The Princess Safety No. 1 is made throughout of the best imported steel tubing. Ball bearings to head, wheels, crank shaft and pedals. Best tubular forks. 30-inch wheels, with 40 tangent spokes. One-piece tubular handle bar, 32 inches long, made of $\frac{1\frac{1}{8}}$ steel tubing. Wood core, rubber handles. Front fork fitted with steel coasters. Detachable bar from neck to seat post, of best steel tube. Best steel chain, adjusted by means of screw device. Steel lantern bracket. Improved Garford saddle, with tool bag containing nickeled oiler and Acme wrench.

Enamel finish, with handle bar, detachable bar and small parts nickeled.

With 30x $\frac{7}{8}$ red rubber tire, price, . . . \$ 85 00

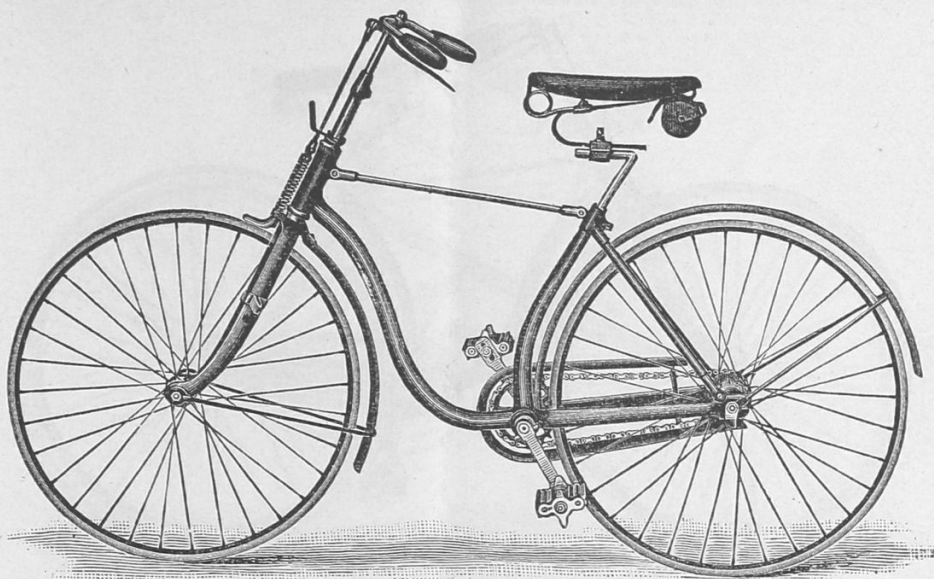
With 1 $\frac{1}{4}$ cushion tire, 100 00

NOTE.—Our Princess Safeties are built of the very best imported steel tubing, which makes the machine light, yet strong. Ball bearings are used in the socket steering head, to wheels, crank shaft and pedals. Drop forged steel cranks of neat design. Steel mudguards are fitted over wheels and chain gear, protecting rider from dirt. The machines are suitable for girls and ladies by detaching the rod running from neck to seat post. We use the celebrated Garford saddle.

Machines are of the very best finish, both in enamel and nickel.

Repairing of all kinds promptly done. Work guaranteed.

Any wheel shipped C. O. D., subject to examination, on receipt of \$5.00 to guarantee express charges.



PRINCESS SAFETY No. 2.

28-INCH.

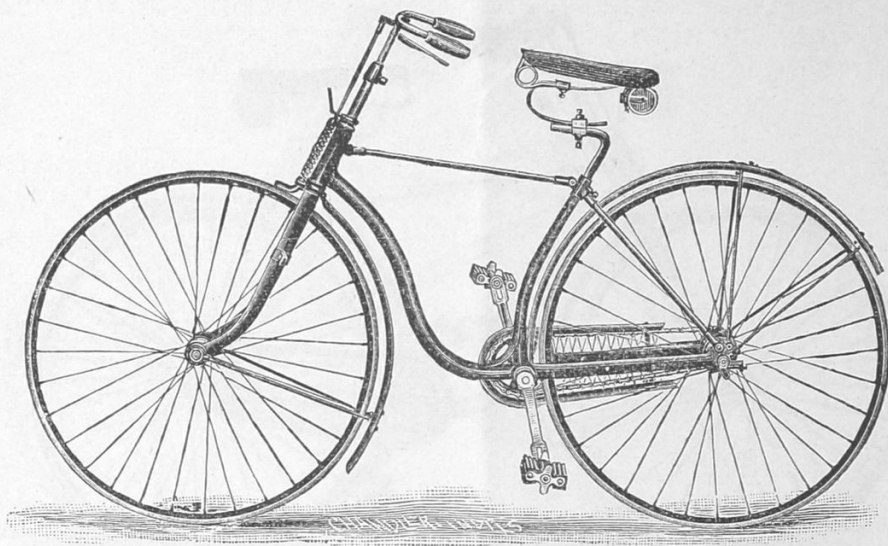
The Princess Safety No. 2 is suitable for boys and girls from 15 to 19 years of age. Best imported steel tubing throughout. Ball bearings to head, wheels, crank shaft and pedals. Best tubular forksides. 28-inch wheels, with 32 spokes. Tangent spokes. One-piece seamless tubular handle bar, 30 inches long, made of $\frac{11}{16}$ steel tubing. Wood core, rubber handles. Front fork fitted with steel coasters. Detachable bar from neck to seat post, of best steel tube. Best steel chain, adjusted by means of screw device. Steel lantern bracket. Improved Garford saddle, with tool bag containing nicked oiler and Acme wrench. Enamel finish, with handle bar, detachable bar and small parts nicked.

With 28 x $\frac{3}{4}$ red rubber tire, price, . . . \$ 75 00

With 1 $\frac{1}{4}$ cushion tire, 87 00

Repairing of all kinds promptly done. Work guaranteed.

Any wheel shipped C. O. D., subject to examination, on receipt of \$5 00 to guarantee express charges.



PRINCESS SAFETY No. 3.

FOR BOYS AND GIRLS.

26-in. Front and Rear Wheels. Price, \$60.

The Princess Safety No. 3 is suitable for boys and girls from 10 to 15 years of age. Best imported steel tubing throughout. Ball bearings to head, crank shaft, wheels and pedals. Best tubular steel forks. 26-inch wheels, with 32 spokes in each wheel. Tangent spokes. One-piece, seamless tubular handle bar, 28 inches long, made of $\frac{11}{16}$ steel tube. Wood core, rubber handles. Front fork fitted with steel coasters. Detachable bar from neck to seat post, made of steel tubing. Best steel chain, adjusted by means of screw device. Steel wire lantern bracket. Improved Garford saddle, with tool bag containing nickeled oiler and Acme wrench.

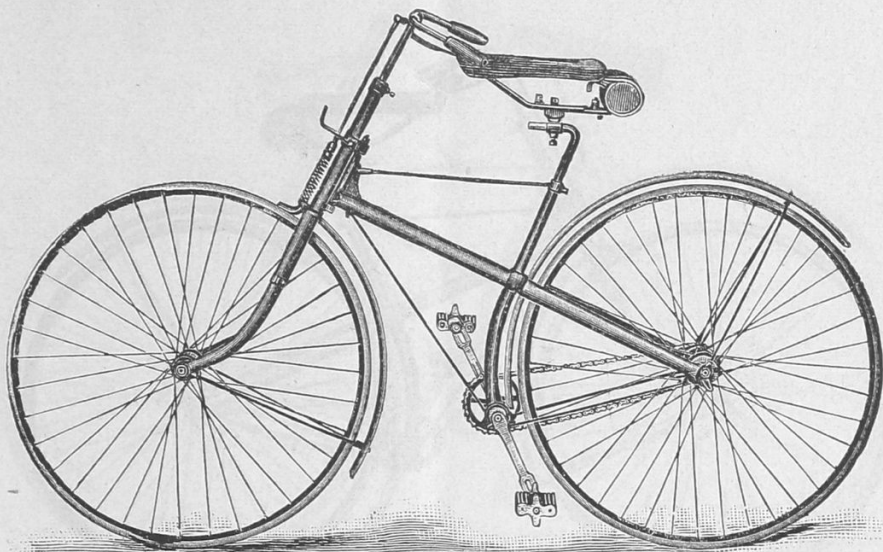
Finest enamel and nickel finish to small parts.

With 26x $\frac{3}{4}$ red rubber tire, price, . . . \$60 00

With 26x cushion tire, 65 00

Repairing of all kinds promptly done. Work guaranteed.

Any wheel shipped C. O. D., subject to examination, on receipt of \$5.00 to guarantee express charges.



CLIMAX No. 1.

30-in. Front and Rear Wheels. Price, \$65.

One of the Best and Most Durable Safeties on the Market.

SPECIFICATIONS.—Wheels are 30 inches in diameter and fitted with $\frac{7}{8}$ red rubber tires. Tangent spokes, 40 in number. Tubular frame, with steel brace rods from each end of perch to bottom bracket, and from neck to seat post. Steel chain, adjusted by means of screw device. Drop forged cranks. Ball bearings to wheels, crank shaft and pedals. Front fork fitted with steel coasters. 32-inch handle bar, made in one piece, of $\frac{5}{8}$ -inch steel, adjustable to height. Steel wire lantern bracket. Mud-guards to front and rear wheels. Fish saddle, with tool bag containing oil can and Acme wrench.

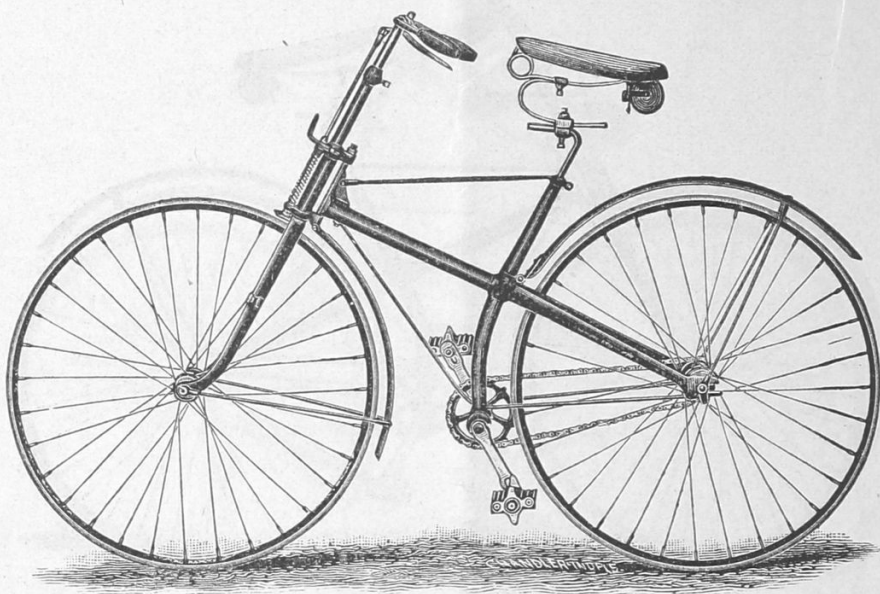
Enamel finish, with handle bar, seat post and small parts nickeled.

NOTE.—It is to be noted that our Climax and Prince Safeties are fitted with ball bearings to wheels, crank shaft and pedals. Wheels have tangent spokes, made of cold drawn steel wire and screwed into brass nipples, which prevents rusting, as in the case with steel nipples. The spokes are tied where crossed by means of a neat brass clamp, which makes a firmer fastening than when steel wire is used, which is generally the case. All of our cross frame Safeties have drop forged steel cranks of neat design. We use the Garford saddle on the Prince and Climax No. 2, this saddle being renowned for its durability and easy riding qualities.

Best of enamel, baked under 200 degrees of heat, give these machines a very fine finish with the nickel-plated parts, including handle, bar and hubs.

Repairing of all kinds promptly done. Work guaranteed.

Any wheel shipped C. O. D., subject to examination, on receipt of \$5.00 to guarantee express charges.



PRINCE SAFETY No. 2.

↔ FOR BOYS ↔

24-in. Front and Rear Wheels. Price, \$35.

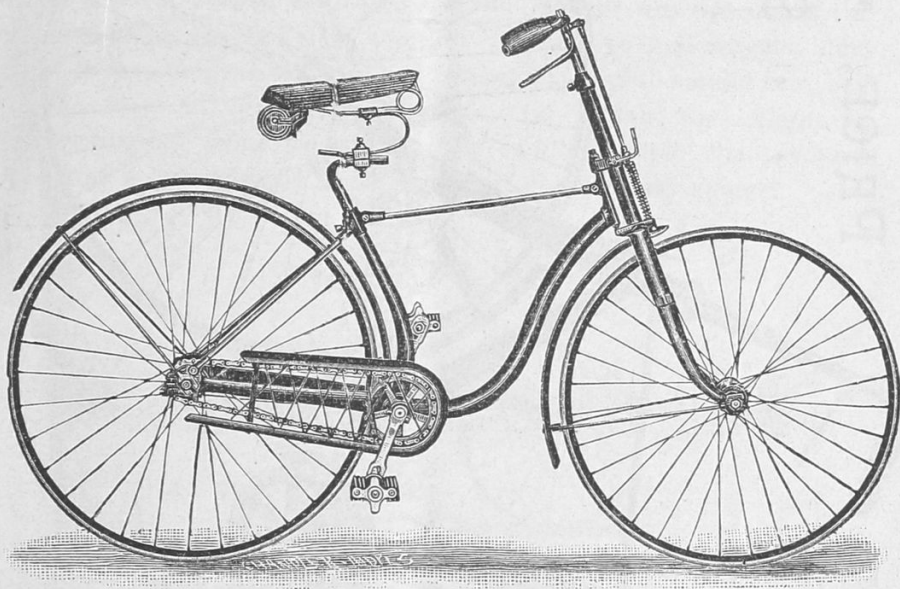
SPECIFICATIONS.—Suitable for boy from 6 to 12 years of age. 24-inch wheels, with $\frac{3}{4}$ red rubber tires. Wheels fitted with tangent spokes, 32 in number. Tubular frame, with steel brace rods from perch to crank axle and from neck to seat post. Chain adjusted by means of screw device. Drop forge steel cranks. Ball bearings to wheels, crank shaft and pedals. Front fork fitted with steel coasters. 28-inch, one piece, $\frac{9}{16}$ steel handle bar, adjustable to height. Wood core, rubber handles. Steel wire lantern bracket. Mud guards to front and rear wheels. Improved Garford saddle. Telescopic tool bag, with oil can and Acme wrench.

Enamel finish, with handle bar, seat rod, cranks and all small parts nickel plated.

Repairing of all kinds promptly done. Work guaranteed.

Any wheel shipped C. O. D., subject to examination, on receipt of \$5.00 to guarantee express charges.

THE GEM.



PRICE, \$50.00.

SPECIFICATIONS.—26-inch wheels, fitted with $\frac{3}{4}$ -inch red rubber tires and 32 tangent spokes to each; brass nipple; 28-inch solid steel handle-bars; vulcanite handles; detachable steel-forged cranks; steel chain; frame is made principally of imported steel tubing; ball bearings on both wheels, pedals and crank shaft; Garford saddle, fitted with pouch containing oil can and wrench; is of a convertible diamond pattern, made sufficiently strong to be used by girls when the brace rod running from head to seat-post is removed.

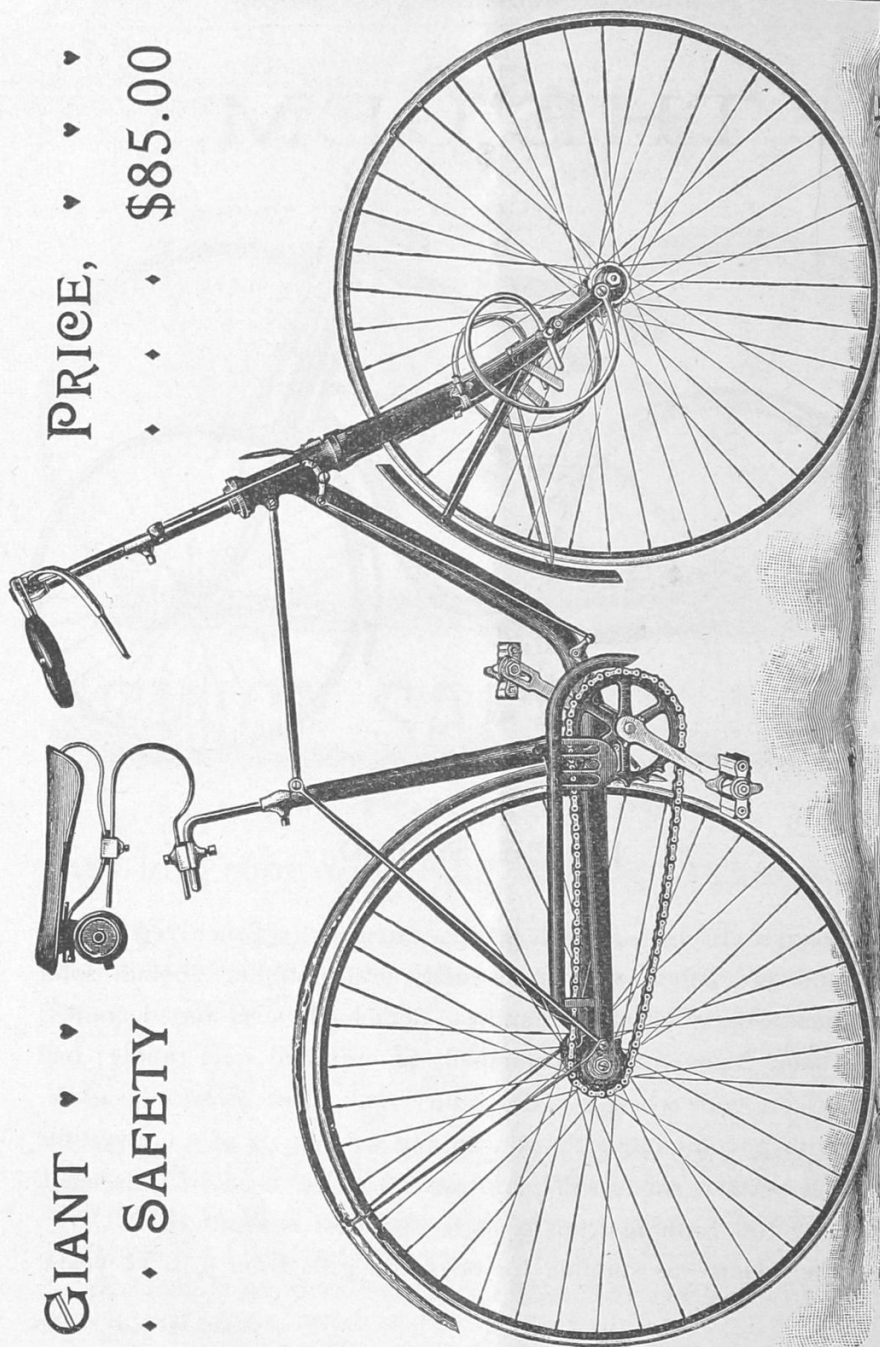
The "Gem" is suitable for boys and girls from 9 to 15 years.

Repairing of all kinds promptly done. Work guaranteed.

*Any wheel shipped C. O. D., subject to examination, on receipt
of \$5.00 to guarantee express charges.*

PRICE, ♡ ♡ ♡
♦ ♦ ♦ \$85.00

GIANT ♡ ♡
♦ ♦ SAFETY



Repairing of all kinds promptly done. Work guaranteed.

Any wheel shipped C. O. D., subject to examination, on receipt of \$5.00 to guarantee express charges.

The Giant Safety.

PRICE, \$85.00.

The Giant Safety is placed on the market this season as the only low price spring fork Safety. It has 30-inch wheels, steel tubing frame, tangent spokes, rear brake, a graceful handle bar, ball bearings to head, wheels, crank axle and pedals, the celebrated Bolte spring on front forks, the Yost saddle, simple chain adjustment, and is handsomely finished in nickel-plate and enamel.



The Little Giant Safety.

PRICE, \$35.00.

The Little Giant Safety is adapted for boys or girls from 6 to 12 years of age, and is the only spring fork boy's machine on the market. It has adjustable cone bearings, tangent spokes, rubber tires, plunger brake, loop frame, Yost saddle, and is handsomely finished.

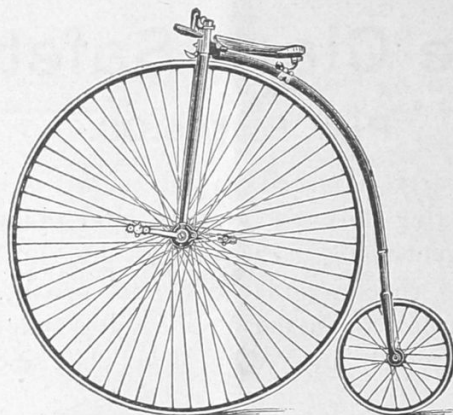
The Ball-Bearing Little Giant.

PRICE, \$45.00.

The Ball-Bearing Little Giant is the same as the Little Giant, except it has ball instead of cone bearings

Repairing of all kinds promptly done. Work guaranteed.

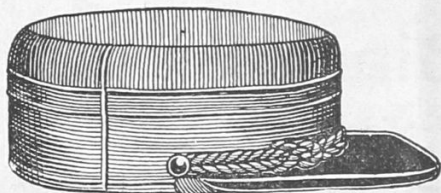
WARWICK ORDINARY.



The **Warwick Ordinary Bicycle** is built of the very best material. Has Hollow Rims, Tangent Spokes, **Warwick Perfection** Perch, Anti-Vibration Springs to the Front Forks, Cow-horn Bars, Spade Handles, Perfection Saddle, Dust-proof Ball Bearings and **Perfection** Rubber Tires.

PRICE, 50 INCH, \$125.

An addition of \$2.50 for every two inches difference in size.
We are prepared to make special prices on Ordinary Bicycles.



BICYCLE CAP

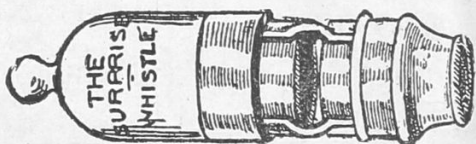
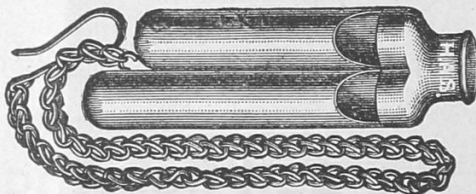
Black Silk. Fine Quality.

PRICE, \$1.25.

Duplex Whistle

(WITH CHAIN)

Price, 30 Cts.

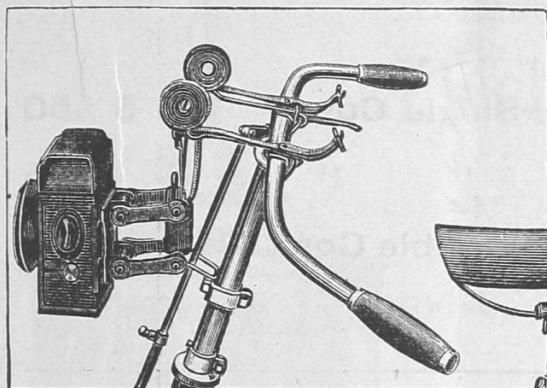


Surprise Whistle

Price, 25 Cts.

Repairing of all kinds promptly done. Work guaranteed.

LAMSON LUGGAGE CARRIER



A simple, handy arrangement for carrying baggage, books, lunch, jacket or any medium sized package.

Price, - - \$1.00

Ostergren's Trouser Guards.

PATENT APPLIED FOR

PRICES:

BLUED, . 15 cts. pair.

ENAMELED, 25 " "

NICKELED, 35 " "



CEMENT

First quality

TIRE - CEMENT

Our own Importation

Price, \$1.00 per lb.

Packed in 1 lb. boxes.

SAVE YOUR PANTS.

✦ POORMAN'S ✦

'Cycle Chain Lubricator.

Diminishes Friction,

Stops Rattling,

Doesn't Gather Dust,

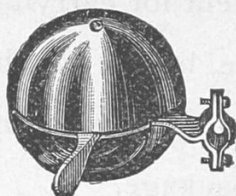
Doesn't Grease the Clothing.

PRICE, PER BOTTLE, - 25 CENTS.

Special discount to the trade.

Any wheel shipped C. O. D., subject to examination, on receipt of \$5.00 to guarantee express charges.

BELLS.



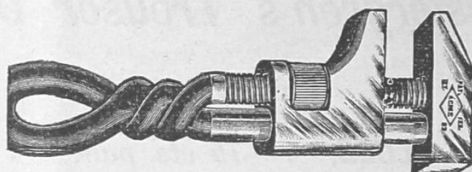
No. 1—Single Gong, \$.50

No. 2 “ “ .75

No. 3—Double Gong Chime, 2.00

ACME WRENCH

Price, 75 Cts.



Billings & Spencer Wrench

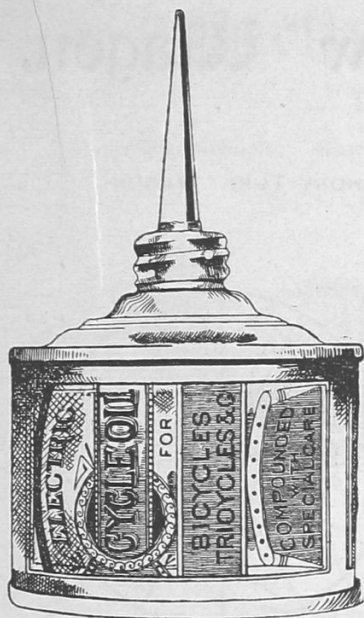
PRICE, \$1.00.

Perfection Oiler

Price, 50 Cts.



Repairing of all kinds promptly done. Work guaranteed.



Electric Cycle Oil

BEST LUBRICATING OIL FOR
CYCLES ON THE MARKET.

Price, per can, - 25 cents.

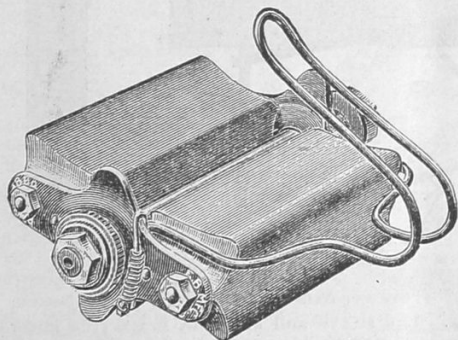
Electric Cycle Lantern Oil

BURNS EVENLY.

DON'T SMOKE.

Price, per can, $\frac{1}{2}$ pint, - - - 25 cents.

Price, per can, 1 pint, - - - 45 cents.



Rankin Toe Clip,

Prevents Slipping of Pedals.

Price, per pair, 50 cts.

Repairing of all kinds promptly done. Work guaranteed.

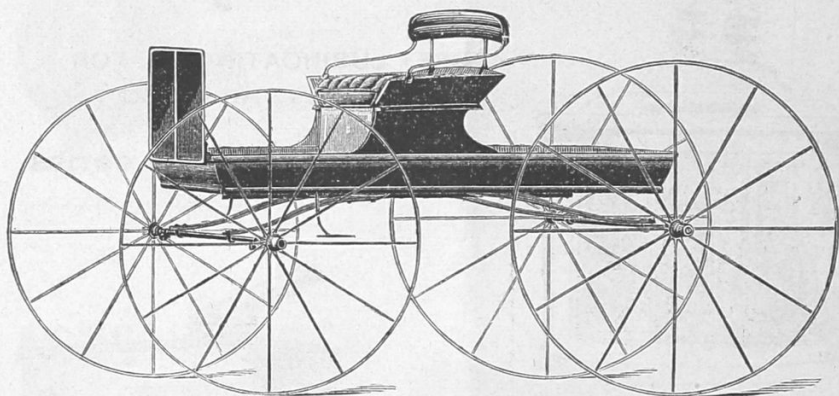
The "Bartholomew" Wagon.

(PATENT APPLIED FOR.)

NO. 30-

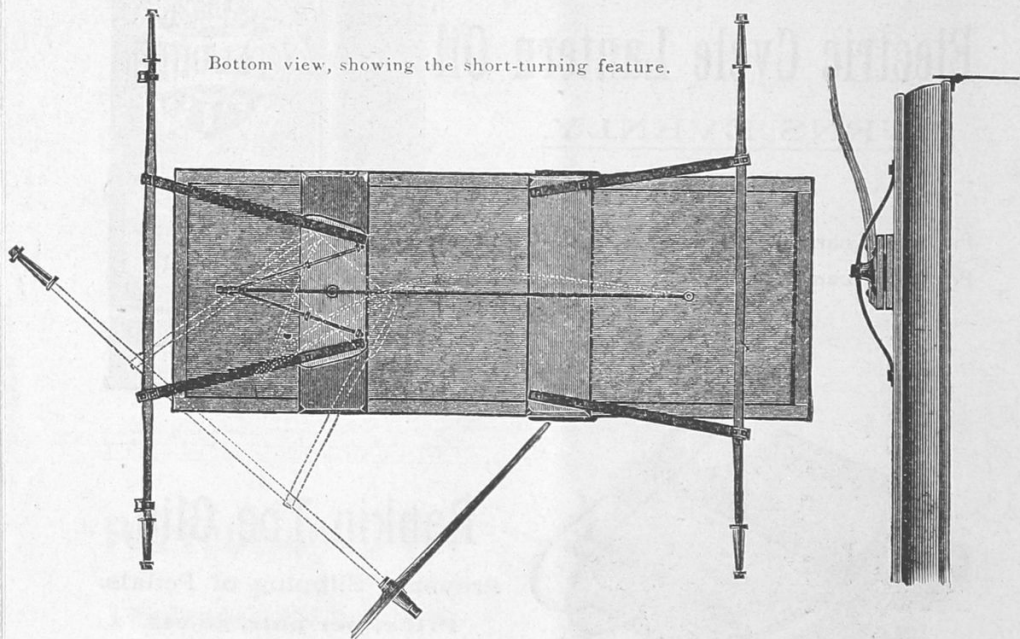
TWO-PASSENGER "BARTHOLOMEW" (SHORT-TURN) WAGON.

(WITH SHAFTS.)



Body, inside, 5 ft. 4 in. long, 26 in. wide, 4½ in. deep.

Bottom view, showing the short-turning feature.



SPECIAL ATTENTION is called to the construction, as shown in the bottom view above, particularly to the Swivel Spring-Bar. The sleeve and king-bolt brace (the latter made of steel) together serve to hold the Swivel Spring-Bar firmly against the body and relieve the king-bolt from strain. This forms a construction at once simple, durable and reliable. It speaks for itself.

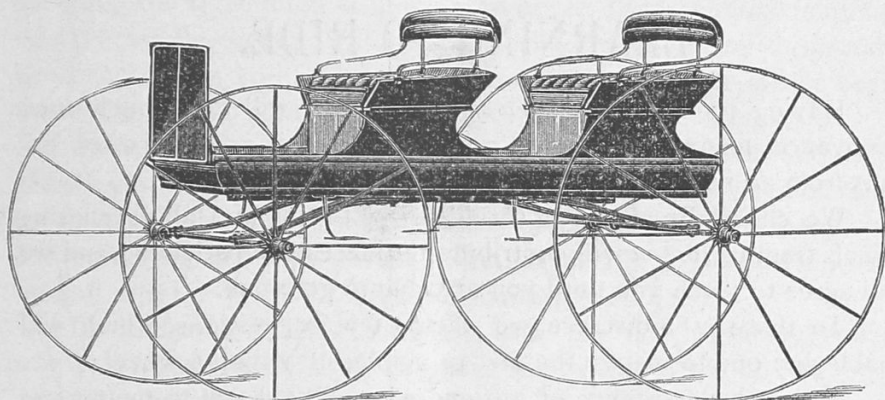
The "Bartholomew" Wagon.

(PATENT APPLIED FOR.)

NO. 40.

FOUR-PASSENGER "BARTHOLOMEW" (SHORT-TURN) WAGON.

(WITH SHAFTS.)



Body, inside, 5 ft. 10 in. long, 26 in. wide, 4½ in. deep.

FEATURES.

Short-Turn—Will turn as short as any cut-under, a feature alone worth the cost of the wagon.

Economy—The first cost is less than any other vehicle of like merit. The after cost, in repairs, which is a considerable item in other vehicles, is nothing to speak of. The saving in repairs will alone pay for the wagon.

Durability—As durable as any vehicle of like kind, and more durable than many of greater price. Complexity does not make durability.

Simplicity—The construction is so simple that there is comparatively nothing to get out of order, nothing to break, nothing to wear out. Easy to handle, easy to clean, easy to care for in every way.

Easy Riding—By a new principle in construction all jolting, swinging, bouncing and rock-

FEATURES.

ing is almost eliminated. With the utility of a wagon is combined greater ease than a buggy of four times the cost.

Neatness—The prettiest wagon on the market. Answers for pleasure as well as for work. The ugliness of superfluous gear entirely obviated. Beauty by means of simpleness and grace.

Lightness—So light, it is wonderful that a substantial wagon can be made with so little to it.

A vehicle for everybody, combining a maximum of utility in all directions with surprising economy in cost. There is no other vehicle combining all these properties, not even at any cost.

DESCRIPTION.

Bodies—Bottoms 1 inch ash, lengthwise. Sides 1 inch poplar or ash, with solid moldings, resting upon and bolted firmly to the bottom.

Gear—All Steel. Double Collar Steel Axles, coaxed, 1 x 1½ inches. Oil Tempered Steel Springs.

Wheels—Sarven Patent, with Steel Tires, 42 and 46 in. high.

Trimmings—Corduroy Cushion, Fall and Lazy Backs.

Painting—Body black. Gear wine color.

Track—Standard, 4 ft. 8 in., or Wide, 5 ft. 2 in. Standard Track furnished unless otherwise specified.



PRICES.

F. O. B. CARS AT CINCINNATI.

No. 30—Two-Pass. Open. \$43 00

No. 31—Two-Pass. Buggy

Top..... 60 00

No. 32—Two-Pass. Can-

opy Top..... 60 00

No. 40—Four-Pass. Open. 50 00

No. 41—Four-Pass. Can-

opy Top..... 68 00

Wide Track..... 1 50

Pole (with shafts)..... 7 50

Pole (without shafts)..... 3 75

FOR SALE BY

J. E. POORMAN, 8TH AND RACE STREETS, CINCINNATI, O.

Any wheel shipped C. O. D., subject to examination, on receipt of \$5.00 to guarantee express charges.

LEARNING TO RIDE.

Having procured a wheel *of your own* it will save much time, annoyance, many tumbles, and repairs to same if you take a few lessons from an instructor.

We cheerfully offer our services *free* to any and all purchasing wheels from us if *you* will contribute the necessary patience; and we will agree to teach you until you are able to go alone.

To those at a distance we offer a few suggestions, which will enable any one to master the first principles of riding a wheel:

Secure the assistance of a friend who will aid you to mount and steady the wheel in your first attempts; or, two beginners can be of great mutual benefit, as they can give one another lessons in turn.

BEGIN VERY SLOWLY. From five to ten minutes at a time will be sufficient at first, when the second man can take his turn, assisted by the first. As bicycling brings into play some muscles not used in other exercises the limbs tire very soon, and you will make little or no progress until you are rested again.

Walking and running with the wheel, while helping the other man, will stretch the legs and restore your elasticity, so that by the time the rider tires you will be fresh and able to resume the lesson.

Sit erect in the saddle, hold the handles firmly, and try to steady yourself and the wheel by using them, and not by moving the body.

Always turn the steering-wheel toward the side to which the machine is falling.

EXERCISE REGULARLY. As in all other things, regular and patient practice will bring better and more lasting results than spasmodic, irregular riding. On every favorable day, after a very light breakfast, the early morning is the best time to take a short ride; and with each succeeding day try to improve your method of pedaling, steering, etc.

TO MOUNT. Place the left foot upon the step, and by a few vigorous hops of the right foot start the wheel. When you have thus

Repairing of all kinds promptly done. Work guaranteed.

Any wheel shipped C. O. D., subject to examination, on receipt of \$5.00 to guarantee express charges.

secured a fair momentum (always being careful to have the steering under control by a good, firm hold, with both hands on the handle-bar), raise yourself with the left foot by means of the step, and elevating the right thigh as much as possible, slide, without jumping, into the saddle, being careful not to bear forward too much upon the handles. When you have gained a firm position on the saddle begin to use the pedals, slowly at first.

By practicing the mount in the beginning very carefully and deliberately you will, in a short while, be enabled to get into position more quickly, as the occasion may require. Mounting from the step by a jerk or spring is a very serious defect, especially if you are a heavy-weight, and the jar will sometimes damage the wheel.

TO DISMOUNT. The simplest and, for the beginner, easiest way is by the left pedal, by throwing the weight of the body upon it when it is exactly at the lowest point of its revolution. At the same time the right leg should be thrown over the backbone of the machine, high enough to clear it entirely.

It may be of some assistance to apply the brake when the left pedal is at its lowest point; but, as a general thing, the brake should not be used too much; a sudden application will cause a jar to both rider and wheel, which may result in a fall and injury.

FOR LADIES. The general rules given above will readily apply to riders of both sexes, with the exception of the directions for mounting and dismounting.

MOUNT. As a lady, by reason of her attire, cannot very well mount from the step it is necessary to have a good assistant to aid her first efforts. The instructor should place her wheel into position, the left pedal a little forward of the vertical. Then, while the assistant holds the machine firmly, she grasps the handles from the left side, places the right foot upon the right pedal and rises to the saddle, when she can proceed according to directions given above for men.

DISMOUNT. Ride very slowly; apply the brake when the left pedal is at the lowest point; bear the weight of the body upon the left foot as you stop; carry the right foot through to the left side, and so step to the ground on the right foot. With patience and practice—*do not hurry*—ladies can, in a very short time, learn to dispense with the services of the instructor and mount or dismount unaided.

Repairing of all kinds promptly done. Work guaranteed.

Any wheel shipped C. O. D., subject to examination, on receipt of \$5.00 to guarantee express charges.

COASTING. This, one of the most delightful parts of bicycle riding, can be acquired very readily after the rider has obtained some control of the wheel. Select a very gentle decline to begin with; hold the brake on partly when starting, so that the wheel does not acquire too much headway. Place the feet upon the coasting irons, or pins, and be sure to keep complete control of the wheel by means of the pressure on the brake. After a few coasts this brake-pressure may be reduced by degrees; and finally, when you have obtained sufficient confidence, and *the road is clear*, the brake may be released entirely; but always keep it within easy reach in case of emergency.

BACK-PEDALING. To slow up the wheel, or to stop it entirely under ordinary circumstances, it is very necessary to acquire the knack of back-pedaling. Sit quite straight, and, as the pedals are at their lowest point, just before they begin to rise, exert a gentle pressure upon them. In descending steep hills the command of your wheel depends, in a great measure, upon your power to feel and hold the pedal at that particular point; and for this reason your wheel should not be too large—that is to say, you ought to be able to readily grasp the pedal at its lowest point, with not only the toe or the ball of the foot, but also with the heel. It is better if the first attempts at back-pedaling be made on the level, and very moderately. The power can be increased by degrees, until a full control is obtained and the brake can be dispensed with nearly altogether. The life of the tire will be increased materially by judicious back-pedaling.

HILL-CLIMBING. Take an easy rise, at first very slowly, with as even a gait as possible, and try to reach the top at the same pace at which you started. When near the top a spurt may be made if there is enough power left; when the brow of the hill is attained slack up gradually, and regain your wind. By-and-by, the average speed in climbing should be quickened; but never start faster than the speed which you can with certainty maintain all the way up. Skill in hill-climbing assists to improve the riding on the level. Do not pedal in a jerky fashion, as it causes the wheel to skid or jump for a moment, which means loss of power.

GENERAL DIRECTIONS. The 'cyclist should, from the very start, aim to be something better than a mere straight-ahead rider; he should learn to become an expert master of his wheel. With this

Repairing of all kinds promptly done. Work guaranteed.

Any wheel shipped C. O. D., subject to examination, on receipt of \$5.00 to guarantee express charges.

object always in view, he should carefully study the various methods by which he applies the power; he should try to acquire an effective and, at the same time, an easy and comfortable style, while developing, by careful and constant practice, the dexterity of limb necessary to "pace." We do not mean to be understood as advocating the cultivation of "trick-riding," which should be left to professionals. The average amateur wheelman should merely endeavor to become acquainted with the qualities and possibilities of his mount.

A fairly erect position should be taken for general road-riding. There may be occasions—such as riding against a high wind, or when riding in a great hurry—when the body may be carried rather forward to advantage; but for all ordinary purposes an easy, graceful, and nearly upright attitude will be found of best service.

CARE OF THE WHEEL. A few moments of attention given to the cleaning and overhauling of the machine immediately after a ride will save time and many repairs. The dust or dirt should be carefully removed from both the nicked or enameled parts, as they will be sure to work into some place where they do harm if allowed to gather.

Nuts, pedals, chain, bearings, head, etc., require to be carefully examined, and, if any part be loose, prompt attention must be given them, as any neglect may endanger the life or limb of the rider.

CARE OF 'CYCLE CHAINS. The great increase in the number of Safety Bicycles ridden, together with the fact that the chain is necessarily the greatest frictional and quickest wearing part, lead us to offer a few hints as to its proper care, knowing from practical experience that if these simple directions are followed greater ease of running, cleanliness, and longer life to the chain itself will result.

"The old style of daubing the chain with vaseline is a mistake. The joints of a chain require lubricating. Vaseline prevents any oil which may be applied from getting to the pins, and it has a remarkable affinity for dust. 'Stretching,' the bugbear of chain-driven machines, is simply wear between the pins and links, and lubrication is the only antidote for this complaint."—*Bicycling World*.

If your machine has not been ridden the chain should be removed, and soaked for an hour or two in sperm oil; or it should be deluged with oil on the machine, and ridden five or ten miles to work

Repairing of all kinds promptly done. Work guaranteed.

Any wheel shipped C. O. D., subject to examination, on receipt of \$5 00 to guarantee express charges

the oil thoroughly on the inner joints. It should then be wiped as dry as possible all over, and given a coating of "Cycle-Chain" Graphite, which may be brushed on or applied with a bit of cotton wool, then burnished (unless a nicked chain) with a dry brush. This will not catch the dust and grit—steel's worst enemy—but will form a dry, glossy surface, enabling the links to roll easily over the teeth of the gear wheels. The Graphite will work in all the inner links of the chain. Such a dressing should last one or two months without further attention, excepting, when needed, to wipe the dust off the chain, which may be done lightly without removing this Graphite.

If your machine has been used the chain should be thoroughly washed with benzine before applying the oil.

If the chain has exposed bearings, as in the Ewart patent, the chain need not be previously oiled, but should be cleaned. The Graphite may then be applied as above.

"Cycle-Chain" Graphite is a fine grade of chemically pure electrotyping graphite, mixed with a definite quantity (formula) of a certain oil. But very little oil is used, and that simply to keep the Graphite from "flying." The Graphite is of flour fineness, and is itself the lubricant.

To take off the chain undo the screw in one of the links.

The chain should be kept at such a tension that, when pressure is applied to the pedal, it will slightly sag on the opposite side.

REPAIRS. With ordinary care, barring accidents, a well-made bicycle will require but very few repairs in the course of a season. The material and workmanship of the high-grade wheels being fully guaranteed we are at all times, within one year from date of purchase, ready to make good defects of material or workmanship. Such repairs as may be necessary we are prepared to make on short notice, in the most workmanlike manner, and at the most reasonable prices. We employ skilled workmen and the best modern tools. Parties from a distance having repairs on wheels for which we are agents, *or on any other makes*, will please express same to us, well-crated and express prepaid, and advise us fully by mail. We will repair carefully, and forward promptly.

Repairing of all kinds promptly done. Work guaranteed.

Any wheel shipped C. O. D., subject to examination, on receipt of \$5.00 to guarantee express charges.

TOURING. Without doubt, this phase of riding on the wheel affords to the enthusiastic 'cyclers sources of enjoyment which he can obtain in no other way. To be able to roam at will—unrestricted by time-tables or other inconveniences of modern travel—into Nature's green fields; to cover distances almost equal to horseback or wagon travel, with much less expense, trouble or fatigue: these are pleasures open to none but the wheelman; and the number of those who thus spend days and weeks a-wheel is increasing every season.

Before planning a tour you want to make application for membership in the "League of American Wheelmen," as it will establish fellowship with many wheelmen scattered all over the country, and afford you legal protection in case of necessity. Application blanks and all information at our salesrooms.

The next thing will be to procure one or more suitable companions, also wheelmen; a solitary trip being in nearly all cases dull and spiritless. If practicable, the riders should be of equal riding ability, so that a poor rider may not retard the progress of the others. It is fair to say that the number of four will extract more enjoyment from such a tour than a greater number.

The route and the average day's journey should then be mapped out by the aid of the road-books and charts, published by the several State divisions. If you would not convert what should be a period of relaxation and pleasure into a period of hard work do not plan and make the day's mileage too large. From twenty-five to thirty-five miles per day is a good average if the tour extends over one week's time; perhaps one day in the week might profitably be devoted to resting or sight-seeing.

The smallest possible amount of baggage should be taken on the wheel, no matter how long the trip may be.

In warm weather, and on a trip of but a few days, besides the regular riding uniform, a light coat, one extra undershirt and drawers, one or two pairs of socks, a few handkerchiefs and necessary toilet articles can be tightly rolled up into one bundle, incased in a sheet of rubber about one yard square and fastened to the handlebar by the luggage carrier. If the tour is for a longer period some clothing and necessities can be sent ahead by express; but experience has taught that the less baggage carried—of course, within certain limits—the

Repairing of all kinds promptly done. Work guaranteed.

Any wheel shipped C. O. D., subject to examination, on receipt of \$5.00 to guarantee express charges.

more enjoyable the trip will be. Some two or three weeks before starting the wheelman should indulge in a course of light training, so that he may not be unprepared for the exertion which he will be called upon to make later on. A daily or, at least, tri-weekly run of ten to fifteen miles on the level; some practice at hill-climbing; and some sharp, quick work for very short distances, will improve the wind and season the powers.

We need hardly mention that on a trip no high speed should be attempted, but merely a fair, steady gait maintained.

Before starting the wheel should be most carefully examined; all parts fully adjusted and well tightened; the tool-bag provided with wrenches, oil-can, tire-tape, and some stout string, to serve in case of accident on the road.

ROAD-LAWS AND RIGHTS OF 'CYCLISTS

It has been established by the courts in various parts of the country that the bicycle, being a vehicle, has the same rights, privileges, and duties as any other vehicle. It has cost much time, work, and money in some instances, to maintain these rights; but chiefly through the influence of the "League of American Wheelmen" it has been effected wherever prejudice and conservatism have attempted to curtail such privileges.

On the other hand, riders of bicycles should, while firmly insisting upon their own rights to the fullest extent, carefully guard against any infringement upon the rights of other vehicles, or pedestrians. While there may be no objection to coasting in the country, where the roads are perfectly clear, it is certainly not in good form to ride at full speed over a crowded thoroughfare. Such a course will, most assuredly, intensify the prejudice against the sport already existing in many quarters, and will injure the wheelmen as a body in the estimation of the public.

The general laws of the road may be briefly summed up as follows:

KEEP TO THE RIGHT.

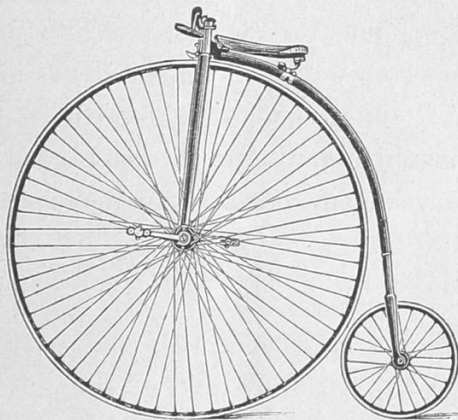
When overtaking another vehicle proceed on the left side of the road, thus keeping the other vehicle on your right; and in so doing do not pass any closer to the horses than is necessary, as the sudden

R pairing of all kinds promptly done. Work guaranteed.

Any wheel shipped C. O. D., subject to examination, on receipt of \$5 00 to guarantee express charges.

appearance of an unusual conveyance, such as the bicycle, must always be considered, may frequently startle even quiet and well-broken horses. If two 'cyclists are riding abreast and meet or overtake a vehicle the accepted rule is that the one nearest the center of the road falls back, thus giving the lead to the rider on the outside. In other words, the outside rider (the one nearest to the side on which the passage is to be made) should always take the lead when passing vehicles; when a vehicle comes toward you the right-hand rider leads while you pass it. When a vehicle is overtaken the left-hand rider should take the lead while you pass it.

Under no circumstances whatsoever should a party divide and pass on both sides of a vehicle.



Repairing of all kinds promptly done. Work guaranteed.

Any wheel shipped C. O. D., subject to examination, on receipt of \$5 00 to guarantee express charges.

TERMS.

Net cash with order.

Give full shipping directions with every order.

Purchaser will always pay freight or express charges.

Positively no discounts allowed except to regular agents.

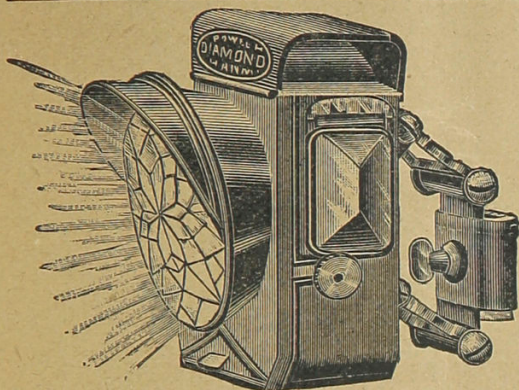
We do not guarantee the safe delivery of goods. Our responsibility ceases when they are delivered at the postoffice, express offices, or freight depots.

C. O. D. orders must be accompanied by sufficient cash to pay express charges both ways, in case the goods are not accepted. We warrant all of our goods to be free from imperfections of workmanship or material, and agree to make good at our store, at any time within a year, any breakage in them not caused by use, misuse, or neglect.

Send remittances by P. O. order, express, or Cincinnati or New York exchange.

Repairing of all kinds promptly done. Work guaranteed.

Any wheel shipped C. O. D., subject to examination, on receipt of \$5.00 to guarantee express charges.

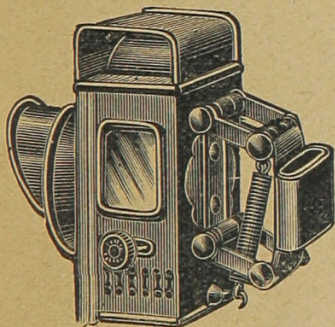
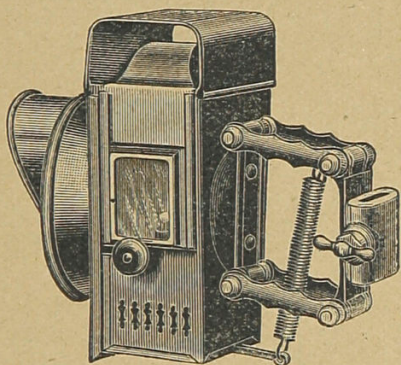


DIAMOND LAMP

PRICE, - \$5.50

RELIANCE LAMP

PRICE, - \$5.00

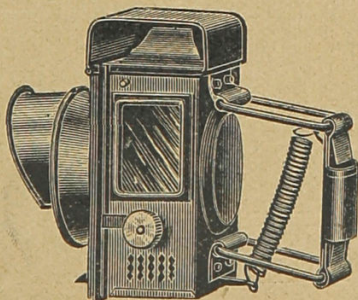


GUIDE LAMP

PRICE, - \$3.00

RIVAL LAMP

PRICE, - \$2.50



Repairing of all kinds promptly done. Work guaranteed.

Any wheel shipped C. O. D., subject to examination, on receipt of \$5.00 to guarantee express charges.

Our Repair Works.

HAVING recently fitted up our repair works with new and improved machinery, we take pleasure in announcing that we are prepared to receive and give prompt attention to all kinds of cycle repairing, no matter how difficult.

As we use none but the best materials and employ only first-class workmen, we can guarantee our work as good as the best.

Prompt Attention. * Reasonable Charges.

REPAIR BILLS STRICTLY C. O. D.

Always Prepay Charges when Shipping to us for Repairs.

Repairing of all kinds promptly done. Work guaranteed.

