

THE WHITE



MANUFACTURED BY
WHITE SEWING
MACHINE CO.
CLEVELAND, O.

BRANCHES
NEW YORK,
BOSTON,
SAN FRANCISCO.

ADVANCE CATALOGUE

FOREIGN
BRANCHES:

LONDON,
PARIS.

***** Specifications "White" 1897 Model D. *****

Weight, 24 Pounds with Fittings. Price, \$75.00.

Frame. Curved drop pattern; $1\frac{1}{4}$ inch cold drawn seamless steel tubing, $1\frac{1}{2}$ inch top bar, height 22 inches, $\frac{3}{8}$ inch tubing in rear forks and $\frac{3}{4}$ inch tubing in rear upright forks.

Frame Parts. All steel connections, strongly re-inforced.

Forks. Steel fork sides, gracefully curved and mechanically re-inforced. Double fork crown.

Steering Head. 11 inches long, $1\frac{1}{4}$ inches in diameter.

Handle Bar. Cold drawn weldless steel tube, $\frac{3}{8}$ inch diameter. Stationary in high, low or ram's horn positions as desired.

Handles. Cork or corkaline with metal tips.

Wheels. 28 inches front and rear.

Wheel Base. 43 inches.

Rims. Kuntz single piece wood, re-inforced at joint.

Tires. Choice of Hartford No. 77 or Morgan & Wright.

Spokes. Swaged piano wire, 28 in front, 36 in rear. Swaged .080 to .060.

Pedals. Grothe, rat trap or rubber. Dust proof centers and bearings. Our own manufacture.

Cranks. Special steel, round and tapered, with throw 6 inches long.

Chain. $\frac{1}{2}$ inch solid link with hardened steel centers.

Saddle. Black, handsome in appearance and especially manufactured to our order.

Saddle Post. Adjustable "L" or direct post.

Tread. 5 inches.

Sprocket Wheels. Both detachable, steel drop forgings.

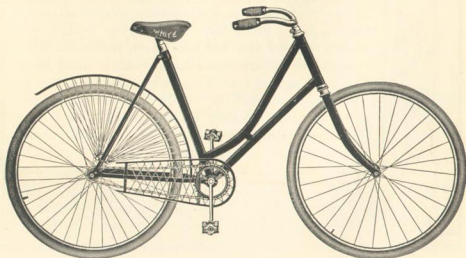
Gear. 63 regular. Higher gear furnished if desired.

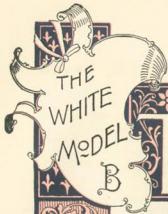
Bearings. Made of best selected high-grade tool steel, carefully tempered and dust proof. We show a far superior construction of the crank bearing to any ever before used. Patented.

Hubs. Large tubular hubs from seamless steel tubing.

Furnishings. Tool bag, wrench, oiler, pump and repair kit. Saddle and tool bag in black leather.

Finish. Handle bar, hubs, sprocket wheels, cranks, pedals, seat post, spokes, screws, nuts and washers, nickel-plated over copper, remainder in black or cardinal.





THE
WHITE
MODEL
B



T



HIS is the ladies' wheel par excellence. In deciding our latest innovation in wheel finishings, we had our thousands of lady friends strongly in mind.

While gentlemen of taste and refinement will see much to admire in our "White-and-Gold" mounts, ladies will take to it naturally as expressive of that high degree of artistic elegance and ultra refinement demanded and made necessary by twentieth-century civilization.

. . . Dainty costumes will be eminently in place on the riders of our "White-and-Gold" beauties. The grace of their fair riders will be enhanced by the elegance and the chic of our beautiful wheels. A comparison of one of our lady's White-and-Gold Model B with any of the ordinary, dark-finished "styles," cannot fail to result greatly to the advantage of our latest steel flyers, and as a work of art alone, it will abundantly repay the time spent in examining this superb wheel. Nothing has been neglected and the price is no higher than is asked by the makers of first-class wheels.





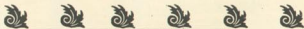
THE
WHITE
MODEL
D



FOR LADIES desiring a medium priced drop frame mount, no better wheel than the "White" Model D can be recommended. It is an elegant and beautiful machine, artistic in every line, and is a most fitting companion to Model C, previously described herein.

It will be seen from the accompanying illustration that this dainty wheel has all the improvements in detail that can be desired by experts, and in general lines is the same as its companion, with the exceptions necessary to make it suitable for ladies' use. Every feature of the wheel is strong, yet light, while its gracefully curved double drop braces are of cold drawn seamless tubing, 1 1-8 inches in diameter.

Wearers of the rational costume, preferring a diamond frame wheel, will find the 1897 Model C especially suited for their use, and we predict a sale for both Models—C and D—equal only to their sterling worth.





ARMONY, Grace and Elegance. A dream of poetic beauty in steel. A departure in wheel finishings. All of the White Wheels are well-known for

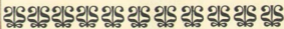
beauty of outline, symmetry, strength and speed. And in this new mount, "The White-and-Gold," all the familiar lines of beauty will be found and recognized. In addition, the delicate finish in purest of virgin white and the richest of yellow gold, in contrasts and blendings, true to the artist instinct in every detail, gives this, our latest and finest production, an air of distinction and elegance that cannot fail to appeal to all lovers of genuine art, and equally as well to those whose refined nature leads them to admire that happy blending of the strong, the delicate, the useful and the beautiful.

Gentlemen should bear in mind that none of the features of peculiar merit that have made the White so famous as a road machine—as a hill-climber, a coaster and every-day stand-by, are omitted in the construction of our "White-and-Gold" Model. They are all there, and in addition, the most attractive finish ever put upon a bicycle.





INTRO-
DUCING
THE
WHITE



ENTERING into the manufacture of bicycles a year ago, our experience was in a manner experimental. We had, however, twenty years' successful operation in high-grade mechanism behind us. Our name had become synonymous with accuracy, durability, honesty of construction, thoroughness of detail. Our methods were as well-known as our name. "In the front rank" well describes the position we have achieved, while in our service are men who have over and over again proven themselves masters in their particular line, and who in the manufacture of "White" bicycles have demonstrated the fact that METHODS and MEN that win in one line are worthy of ample confidence in any collateral line.

It is fitting and most appropriate that we here express our gratitude to the public for the friendly greeting accorded our wheel, for the readiness with which the merits possessed by the "White" were recognized and approved, and for the constant loyalty and unswerving allegiance that has made our wheel the success of the present era. We assure every patron and friend that the "White" shall continue in the front ranks and that no effort shall be spared, no expense withheld that can tend to place our product still further in the van of progress. We invite careful attention to the descriptive matter following.



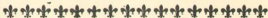
Yours respectfully,

THE WHITE SEWING MACHINE CO.





IMPOR-
TANT
FEATURES
OF THE
WHITE.



EVERY desirable feature in the manufacture of bicycles is embodied in those of our production, ease of management, speed and adaptability are necessarily features found in the "White" as they are found nowhere else. Our "White-and-Gold" finish is the daintiest conceit ever employed to render the bicycle beautiful and attractive. Our designs are the work of artists—men at the head of their profession and so acknowledged to be—men whose efforts are constantly directed toward higher and higher conceptions of perfection and adaptability. The lines of the "White" wheels combine grace and beauty with the highest form of durability and rigidity. They fully embody every requirement—speed, comfort, beauty of outline, accuracy of fittings, simplicity of repair. There is nothing left to be desired.

In the two essentially important particulars of material and workmanship, it is needless to add that the "White" is at the apex. Every piece of material closely and repeatedly inspected, every mechanic the best that can be employed, every process carefully scrutinized, every finished part severely tested, every wheel tried, tested, abused, inspected over and over again, strains put upon them that do not come upon many wheels in actual use—all these things are every-day common-places in the magnificent plant in which the "White" was born, and from which thousands of these splendid machines have been turned out during the past year, and from which thousands more must come to satisfy the demands.

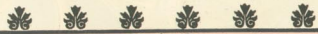


WISELY recognizing the fact that a large demand exists for a first-class wheel at a somewhat lower price than is asked for our Models A and B, the manufacturers of the "White" have taxed their ingenuity to produce one that will meet this requirement, and at the same time sustain their reputation as builders of high-grade bicycles.



Following out this idea, Model C is offered as a strong, up-to-date mount in every respect. It is designed and placed on the market to meet the requirements of an every-day wheel for gentlemen's use. It is substantial, light in weight, handsome, suitable for either rough or light road work, or pleasure riding, and has incorporated in its make-up the latest features and improvements in bicycle construction.

It has large tubing, narrow tread, swaged piano wire spokes, tool steel bearings, detachable sprocket wheel and large tubular hubs. At the price at which this wheel is offered, it is sure to win its way into popular favor.



***** Specifications "White" 1897 Model C. *****
 Weight, 24 Pounds with Fittings. Price, \$75.00.

Frame. High diamond pattern; $1\frac{1}{8}$ -inch cold drawn seamless steel tubing, height 24 or 26 inches, $\frac{3}{4}$ -inch tubing in rear forks, $\frac{5}{8}$ -inch tubing rear upright forks.

Frame Parts. All steel connections, strongly reinforced.

Forks. Steel fork sides, gracefully curved and mechanically reinforced. Double fork crown.

Steering Head. 9 inches long, $1\frac{1}{4}$ inches in diameter.

Handle Bar. Cold drawn weldless steel, tube $\frac{7}{8}$ -inch in diameter. Stationary in high, low or ram's horn positions.

Handles. Cork or corkaline with metal tips.

Wheels. 28 inches, front and rear.

Wheel Base. 43 inches.

Rims. Kuntz single piece wood, reinforced at joint.

Tires. Choice of Hartford No. 77 and Morgan & Wright.

Spokes. Swaged piano wire, 28 in front, 36 in rear. Swaged .080 to .060.

Pedals. Grothe, rat trap or rubber. Dust proof centers and bearings. Our own manufacture.

Chain. $\frac{1}{4}$ -inch solid link, with hardened steel centers.

Cranks. Special steel, round and tapered, with throw $6\frac{1}{2}$ inches long.

Saddles. Black, very handsome in appearance and specially manufactured for us.

Saddle Post. Style "T."

Cread. 5 inches.

Sprocket Wheels. Both detachable, steel drop forgings.

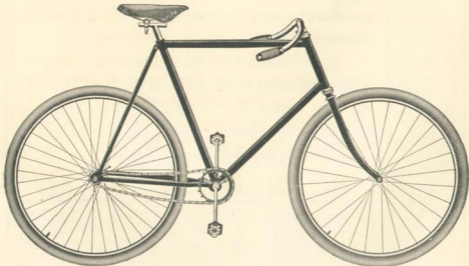
Gear. 70 regular.

Bearings. Made of the best selected high-grade steel, carefully tempered and dust proof. We show a far superior construction of the crank bearing to any before used. Patented.

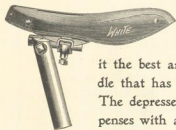
Hubs. Large tubular hubs from seamless steel tubing.

Furnishings. Tool bag, wrench, oiler, pump and repair kit. Saddle and tool bag in black leather.

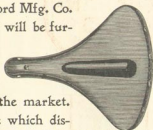
Finish. Handle bar, hubs, sprocket wheels, cranks, pedals, seat post, spokes, screws, nuts and washers, heavily nickel-plated over copper, remainder in black or cardinal enamel.



Saddles. The saddles we shall use on our wheels for this season are those made specially for us by the Garford Mfg. Co.

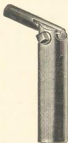


The one by cut will be furnished on Models "A" and "B." We consider

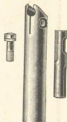


it the best and most comfortable saddle that has ever been placed upon the market. The depressed centre is a new feature which dispenses with any pressure on sensitive parts of the body.

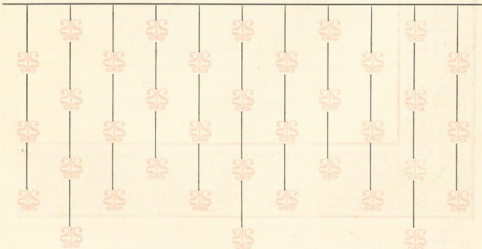
Seat Post. We wish to call special attention to our new seat post, which we think the most ingenious ever devised. The jaws are



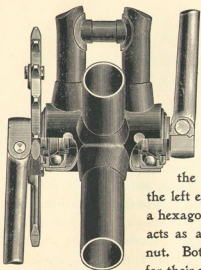
held firmly in the grooves of the bar which forms the "L" by a screw, which makes the whole as one solid piece. This "L" part can be placed either in front or rear, at the will of the rider, by removing the screw, it being impossible to change the "L" part without entirely removing the screw, thus obviating any possible danger if the screw should become loose or accidentally left so. The fine, trim appearance of this post,



as shown by illustration, will be highly appreciated by the rider.



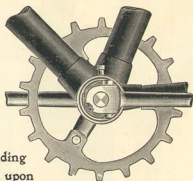
Crank Bearings. Models "C" and "D." This is a further de-



velopment of the bearing which we used in '96, the special features being as follows: The arms of the sprocket are integral with the shaft, allowing us to use plain cranks, which are fastened with cotter pins to this shaft.

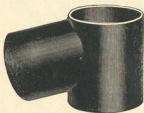
The right hand cone is securely locked to

the shaft, while the left engages with a hexagon nut which acts as an adjusting nut. Both cones depending for their central position upon



long plain ground bearings. The ball retainers are in such position, that the bearing can be taken apart without danger of the balls falling out. 5-16 balls are used, as they have been proven as the most desirable for the crank bracket.

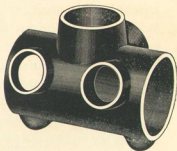
Frame Connections. The frame connections in Models "A" and "B," including the bottom bracket, are made from



the best quality of cold rolled sheet steel, with the exception of the seat post bracket, which is a drop forging. These are all seamless, the lugs being made so by being electrically weld-

ed, while the bottom bracket is without a seam of any kind. The metal in these being absolutely uniform and of the very best quality,

they are not subject to the variations of "cold shuts" of a drop forging, and we consider they are far superior to them.



***** Specifications "White" 1897 Model A. *****
 Weight, 23 Pounds with Fittings. Price, \$100.00.

Frame. High diamond pattern $1\frac{1}{4}$ inch cold drawn seamless steel tubing, $1\frac{1}{8}$ inch top bar, height 24 or 26 inches, $\frac{7}{8}$ inch tubing in rear forks, $\frac{3}{4}$ inch tubing in rear upright forks.

Frame Parts. Seamless sheet steel connections all strongly re-inforced.

Forks. Seamless steel fork sides, gracefully curved and mechanically re-inforced. Double fork crown.

Steering Head. 9 inches long, $1\frac{1}{4}$ inches in diameter.

Handle Bar. Cold drawn weldless steel, tube $\frac{3}{8}$ inches in diameter, adjustable to four positions. Our own invention.

Handles. Cork with metal tips.

Wheels. 28 inches, front and rear.

Wheel Base. 44 inches.

Rims. Kuntz reinforced laminated rims.

Tires. Morgan & Wright or Hartford.

Spokes. Swaged piano wire, 28 in front, 36 in rear. Swaged .080 to .060.

Pedals. "King," rat trap or rubber. Dust proof centers and bearings. Our own.

Cranks. Special steel, round and tapered, with throw $6\frac{1}{2}$ inches long.

Chain. $\frac{3}{4}$ -inch solid link, with hardened rivet and steel center.

Saddle. Made especially to our order in black or tan leather.

Saddle Post. An entirely new device, adjustable. Patented.

Tread. 5 inches.

Sprocket Wheels. Both detachable, steel drop forgings, hardened.

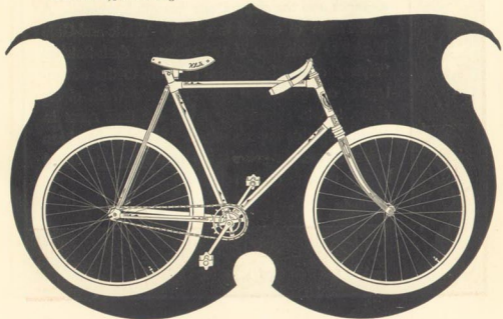
Gear. 70 regular. Higher if desired.

Bearings. Made of the best selected high-grade tool steel, carefully tempered and dust proof. A far superior construction of the crank bearing than any heretofore used. Detailed description, page 11.

Hubs. Large tubular hubs from solid bar steel.

Furnishings. Tool bag, wrench, oiler, pump, repair kit. Saddle and tool bag in black or tan leather.

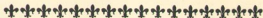
Finish. Handle bar, hubs, sprocket wheels, cranks, seat post, pedals, spokes, screws, nuts, washers, heavily nickel-plated over copper. Fork crowns in white enamel with gold edge. Remainder finished in either white, black, maroon or "Brewster" green enamel, elaborately gold striped.





**TIRE
GUARAN-
TEES**

WE



AGREE to repair, free of charge, any tires that can be repaired, no matter how the injury may have been caused, provided such tires are delivered to us express prepaid.

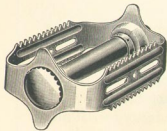
We further agree to replace, free of charge, any tire which upon examination we find defective in material or workmanship, provided such tire is delivered to us express prepaid. This agreement applies to all tires sold by us after September 1st, 1896, and expires, February 1st, 1898. This agreement does not apply to tires into which any so-called anti-leak preparation has been introduced. **HARTFORD RUBBER WORKS COMPANY, Hartford, Conn.**

Branch Offices

100 Chambers St. - NEW YORK CITY.	251 1st Ave., South, MINNEAPOLIS.
910 Filbert Street, PHILADELPHIA.	8 Queen St., East, - TORONTO, CAN.
136 East Lake Street, - - CHICAGO.	19 Beale Street, - SAN FRANCISCO.
370 Atlantic Avenue, - - BOSTON.	

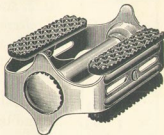
We shall continue in 1897 our custom of repairing all tires of our manufacture free of charge. We shall replace defective parts, when, in our judgment, the defect is from our fault. In no case will we replace when worn out in service or injured by accident. Make your request direct to us, and not through the makers of your wheel. Express charges on tires must be prepaid in every instance. If return by mail is desired, postage at the rate of one cent per ounce must come with the request for repairs. Do not send the wheel with the tire. See that every package sent has your address securely fastened to the package. **MORGAN & WRIGHT, 331 to 339 Lake Street, Chicago, Ill.**

The King Pedal. The "King" is the outgrowth of a number of years experience in pedal manufacture. It has an endless

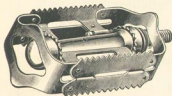


steel band made very strong and light, with the ball cups set into same and specially hardened. The adjustment which takes place in the outer end is very simple, and it is thoroughly protected from dirt by a dust proof cap. The end next the crank has also a special dust proof device. The special feature of this pedal is the large number of balls, fifteen, which are in the outer

end, it having been found by experience that most of the strain of the pedal comes on the outer end. The rubbers, as will be seen, fit directly on to the rat-trap pedal, and are fastened securely by only one screw. This makes it very convenient, as the agent has at all times either a rubber or rat-trap pedal at the wish of his customer, by removing or adding the rubbers, which can be done in but a few seconds. This pedal will be used exclusively on Models "A" and "B."

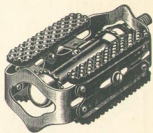


Grothe Pedal. This pedal, with which all our "C" and "D" wheels will be equipped, is well known for its durability and



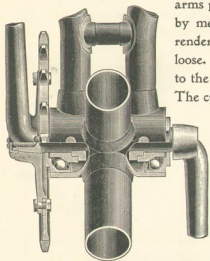
easy running qualities. The '97 Grothe has twelve balls in the outer end, while the adjusting screw has been changed so that it can be readily adjusted with an ordinary screw driver from the op-

posite end. It also has a dust proof cap covering opening into the balls on the shaft crank end, which makes it practically impossible for dust to interfere with the bearings. The rubbers for these pedals are the same as those for the "King," and are fastened to the pedal with only one screw.



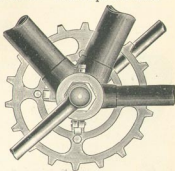
Crank Bearings. Models "A" and "B."

This crank bearing possesses several very novel features in that there are no cotter pins, one crank and the axle being integral, while the other crank, from which there are four sprocket arms projecting, is fastened to the end of this shaft by means of a lock nut and a left hand screw, rendering it impossible for the lock nut to become loose. This crank is held in its proper relation to the other by a key firmly seated in the shaft.



The cups screw into the bracket, allowing the adjustments to be made by the cup, on the outside of which and solid with the cup is a hexagon nut, so that the adjustment can be made with an ordinary wrench, not requiring a special spanner, a very convenient feature to the rider. Inside of the cup, surrounding the shaft, is a felt washer, making the bearing practically dust proof. The balls in the cups are

held in place by retainers, permitting the cups and bearings to be taken apart without the slightest danger of losing the balls. The cups are held in place by clamping the bottom bracket by means of the lugs and a screw. The cones are attached to the shaft with a very ingenious lock, thus fixing them stationary on the shaft, and at the same time have a long plain bearing on same. This feature allows us to obtain a very true cone, and at the same time make it from a special cast steel, which we harden very hard without danger of breakage. We have retained the famous three point bearings. This bearing is oiled through two oil cups, one on each side, through which oil drops directly down onto the cones.



The sprocket wheel is of the latest and most approved double ring type and made especially from our own dies.

***** Specifications "White" 1897 Model B. *****
Weight, 24 Pounds with Fittings. Price, \$100.00.

Frame. Drop pattern, gracefully curved upper bar; $1\frac{1}{4}$ -inch cold drawn seamless steel tubing, $1\frac{1}{4}$ -inch top bar, $\frac{3}{8}$ -inch tubing in rear forks and $\frac{1}{2}$ -inch tubing in rear uprights. Height, 22 inches.

Frame Parts. Seamless sheet steel connections, strongly reinforced.

Forks. Seamless steel fork sides, gracefully curved and mechanically reinforced. Double fork crown.

Steering Head. 11 inches long, $1\frac{1}{4}$ inches in diameter.

Handle Bar. Cold drawn weldless steel, tube $\frac{3}{8}$ -inch in diameter. Adjustable to four positions. Our own invention.

Handles. Cork with metal tips.

Wheels. 28 inches, front and rear.

Wheel Base. 44 inches.

Rims. Kundtz reinforced laminated rims.

Cires. Hartford or Morgan & Wright.

Spokes. Swaged piano wire, 28 in front, 36 in rear. Swaged .080 to .060.

Pedals. "King," rat trap or rubber. Dust proof centers and bearings. Our make.

Cranks. Special steel, round and tapered, with throw 6 inches long.

Chain. $\frac{1}{2}$ -inch solid link with hardened rivet and steel centers.

Saddle. Made special to our order in black or tan leather.

Saddle Post. An entirely new device, adjustable. Patented.

Cread. 5 inches.

Sprocket Wheels. Both detachable, steel drop forgings.

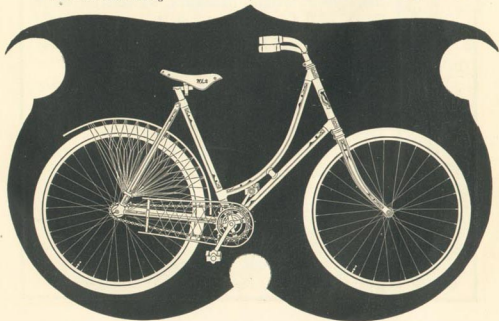
Gear. 63 regular. Higher if desired.

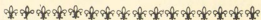
Bearings. Made of the best selected high-grade tool steel, carefully tempered and dust proof. A far superior construction of the crank bearing to any heretofore used. Detailed description, page 11.

Hubs. Large tubular hubs from solid bar steel.

Furnishings. Tool bag, wrench, oiler, pump, repair kit. Saddle and tool bag in black or tan leather.

Finish. Handle bar, hubs, sprocket wheels, cranks, seat post, pedals, spokes, screws, nuts, washers, heavily nickel-plated over copper. Fork crowns in white enamel with gold edge. Remainder finished in either white, black, maroon or "Brewster" green enamel, elaborately gold striped.





AGREE with the purchaser of each "White" Bicycle to make good by repair or replacement, when delivered at our factory, transportation prepaid, any imperfection or defect in material or manufacture not caused by mis-

use or neglect; provided that the factory serial number shall be on such bicycle at the time the claim is made, and that all imperfect or defective parts shall be referred to us before any claim or replacement shall be allowed. This guarantee continues for six months from the date of the sale by the agent.

• • • • • TERMS OF SALE. • • • • •

Dealers desiring to open accounts are requested to send us, as references, the names of two or more well-known commercial houses with whom they have business relations. No discount will be allowed from list prices, except to regular dealers.

Charges must be prepaid on all goods returned, with owner's name distinctly marked on the tag. We are not responsible for safe delivery of goods beyond the Post Office, Express or Freight Depots in this city. With every order give full shipping instructions. Address all business correspondence

THE WHITE SEWING MACHINE CO.,
124-126 Euclid Avenue, • • • • • Cleveland, Ohio.

