(No Model.) C. GRAESSLE. CASTER.

G

H

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No. 568,025.

K

Fig. 3.

Patented Sept. 22, 1896.

К

J

F

G



+B

C

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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UNITED STATES PATENT OFFICE.

CHARLES GRAESSLE, OF WOODBURY, NEW JERSEY, ASSIGNOR TO THE WOODBURY MANUFACTURING COMPANY, OF NEW JERSEY.

CASTER.

SPECIFICATION forming part of Letters Patent No. 568,025, dated September 22, 1896.

Application filed July 31, 1895. Serial No. 557,671. (No model.)

To all whom it may concern: Be it known that I, CHARLES GRAESSLE, a citizen of the United States, residing at Woodbury, in the county of Gloucester, State of 5 New Jersey, have invented a new and useful Improvement in Casters, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a caster having a 10 spindle and side arms formed of a single blank and provided with a novel binder for the lower end of the spindle.

It further consists of the combination of parts hereinafter set forth and claimed.

Figure 1 represents a perspective view of a 15 caster embodying my invention. Fig. 2 represents a vertical section on line x x, Fig. 1. Figs. 3 and 4 represent face views of blanks from which parts of a caster embodying my 20 invention are formed. Figs. 5 and 6 repre-

whose walls are slightly turned up, if so de- 50 sired, as at Q, and place said plate on the shoulders E, the spindle passing through the opening P. The ends R of the blank are then turned down upon and then under said shoulders, as at R', thus embracing the tubular 55 spindle and preventing the separation of the parts thereof and binding together the shoulders E and preventing spreading of the same, while strengthening the connection of the spindle and shoulders, it being seen that the 60 device is light, inexpensive, strong, and durable.

The arms B may be struck up, crimped, or corrugated, as shown in dotted lines, for the purpose of strengthening the same. Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

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- sent steps in the manufacture of a caster embodying my invention.
- Similar letters of reference indicate corresponding parts in the several figures.
- Referring to the drawings, A designates the 25 spindle of a caster, and B the arms on which the roller proper, C, is mounted, said spindle being hollow or tubular and formed with the arms of sheet metal.
- D designates a binder which encircles the 30 spindle and embraces the shoulders E beneath the same, thus preventing spreading of said parts.

In carrying out my invention I take the 35 blank F of sheet metal, the same consisting of the body G, with the central and end enlargements H J, if desired, and the deflected limbs K. The blank is bent into two lengths on the line L and then stamped, struck up, 40 or otherwise formed into the two-part or sectional tubular spindle A, with the top and bottom shoulders A' A². The enlargements J are bent laterally, forming the shoulders EE. The limbs K are bent downwardly, pro-45 ducing an arm B on each section of the spindle, which arms are pierced, as at M, for the reception of the axle of the roller proper. I also take the blank N, consisting of a plate of sheet metal, and form an opening P therein,

1. A caster having a sectional tubular spindle, divided vertically on opposite sides but 70 closed at the top, a laterally and horizontally extending shoulder on each of said sections and a depending arm on the outer end of each of said shoulders, substantially as described.

2. A caster having a sectional tubular spindle normally united at the top, and provided at its base with lateral shoulders having depending arms, and a binder which embraces said spindle, said parts being combined sub- 80 stantially as described.

3. A caster having a spindle with a closed top and divided vertically on opposite sides forming two sections, laterally horizontallyextending shoulders on each of said sections 85 having depending arms on the outer ends, and means for holding sections closed in place, said parts being combined, substantially as described.

4. A caster having a tubular spindle, shoul- 90 ders extending laterally from said spindle, and a roller-bearing arm on each shoulder, and a binder fitted on said spindle and embracing the shoulders, substantially as described. 5. A caster having a tubular spindle divided 95 on opposite sides and with enlarged upper and lower portions, and flat laterally-extending shoulders and depending arms, formed of

568,025

a single blank, having an enlarged rectangular central portion H, body portion G and portions J of substantially the same width as the portion H bent transversely at the center 5 of said portion H, to form said spindle with enlarged upper and lower ends, and said blank having the flaring ends K forming the said flat

| laterally-extending shoulders and depending | arms, substantially as described.

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CHAS. GRAESSLE.
Witnesses:
JOHN A. WIEDERSHEIM,
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R. II. GRAESER.

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