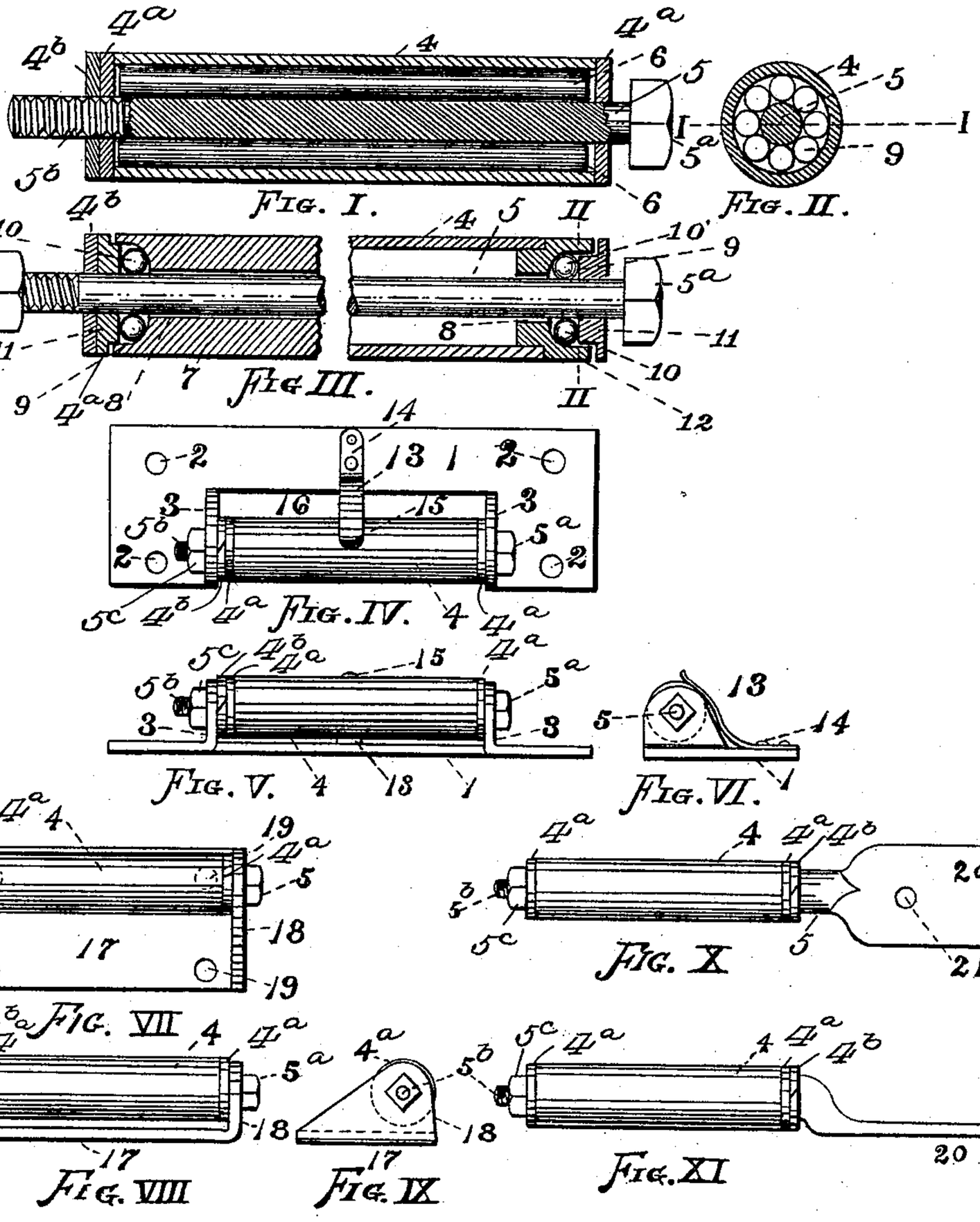
(No Model.)

G. LE SAGE.

REVOLVING RUB IRON.

No. 583,329. Patented May 25, 1897.



WITNESSES:
Geo. W. LeSage
Frank Van Vleck

INVENTOR
G. Le Sage.
BY
Knight Bros.
ATTORNEYS

UNITED STATES PATENT OFFICE.

GIDEON LE SAGE, OF LOS ANGELES, CALIFORNIA.

REVOLVING RUB-IRON.

SPECIFICATION forming part of Letters Patent No. 583,329, dated May 25, 1897.

Application filed November 13, 1896. Serial No. 611,982. (No model.)

To all whom it may concern:

Be it known that I, GIDEON LE SAGE, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Revolving Rub-Irons for Vehicles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improved form of rub-iron to be placed on the side of a vehicle to receive the contact of a wheel in turning the vehicle around or in changing its direction; and my invention consists in certain features of novelty hereinafter described and claimed.

Figure I is a longitudinal section taken on line I I, Fig. II. Fig. II is a transverse section taken on line II II, Fig. III. Fig. III is a longitudinal section showing construction of a different form from that shown in Fig. I. Fig. IV is a bottom view showing roller journaled to plate and showing spring for preventing rattling of the roller. Fig. V is an edge view or side elevation of Fig. IV. Fig. VI is an end elevation of Fig. IV. Fig. VII is a bottom view showing slightly-different construction of attaching plate. Fig. VIII is a side elevation of Fig. VII. Fig. IX is an end elevation of Fig. VII. Fig. X is a bottom view showing connecting-plate at one end of the rub-iron roller. Fig. XI is a side elevation of Fig. X.

Referring to the drawings, 1 represents a plate having orifices 2, through which a clamp (not shown) may be inserted to secure the rub-iron to the spring of a vehicle in the form of vehicles in which the spring extends along the side and underneath the bed of the vehicle.

3 represents ears formed out of the body of the plate 1 and bent at right angles therewith, said ears supporting the revolving rub-iron 4. The ears 3 are provided with orifices into which a bolt 5 is inserted, said bolt supporting the rub-iron or cylinder 4. The rub-iron 4 may be made in the form of a sleeve, as shown in Fig. I, with a series of rollers 6 interposed between the inner side of the sleeve and the bolt 5, the result being that as the wheel comes in contact with the rub-iron 4 it turns upon the rollers 6, said rollers turning upon the central bolt 5.

4^a are cap-pieces whose peripheries are flush with the periphery of the cylinder. Between one of the cap-pieces and the adjacent ear is located a split washer 4^b. The bolt 5 is provided with a head 5^a, a screw-thread 5^b, and a securing-nut 5^c.

In Fig. III, I have shown a modification wherein the rub-iron 7 is formed of a solid piece, with the exception of the central orifice 8, through which the bolt 5 extends. In this construction I provide a recess 9 at each end of the roller, in which I place balls 10, which form the bearing instead of the rollers 6, in this form of construction said balls being held in proper position by means of a washer or cap-piece 11. In the opposite end of Fig. III, I have shown sleeve construction shown in Fig. I, but have used the balls 10 instead of the rollers 6, the end of the sleeve being plugged with a member 12, said member having a recess 9 for the reception of the balls, and having orifice 8, so as to admit the bolt 5, the member 12 being closed with the cap-piece 11, as shown at the opposite end of said figure. In Fig. IV, I have shown an antirattler-spring 13, secured to the plate 1 at 14 and having the outer end 15 resting against the roller or rub-iron, said spring preventing the roller from vibrating and dispensing with the rattling of that member, the plate 1 being provided with a recess 16, said recess being essential in the form where the rub-iron is secured to said spring.

In Fig. VII, I have shown the supporting-plate 17 of different construction from the plate 1, said form being intended to attach to the bed or box of the vehicle, plate 17 having ears 18 for the support of the bolt 5 and having screw or bolt holes 19 for securing it to the vehicle.

In Figs. X and XI the roller or rub-iron 4 is supported on the outer end of the bolt 5, said bolt having its inner end flattened into a plate 20, having orifices 21, by which means the device may be bolted or otherwise secured to the bed of the vehicle. This form of rub-iron may be set at any angle with the side of the bed and extended outward from its side to any length desired.

I claim as my invention—

1. A rub-iron for vehicles comprising a supporting-plate, a bolt, a cylinder, antifriction-bearings located between the bolt and the surrounding cylinder, and the cap-pieces having their peripheries flush with the periphery of the cylinder; substantially as described.

2. A rub-iron for vehicles comprising a supporting-plate formed with ears, a bolt, a cylinder mounted in the ears, antifriction-bearings located between the bolt and the surrounding cylinder, and the cap-pieces; substantially as described.

3. A rub-iron for vehicles comprising a supporting-plate provided with a recess and ears formed out of the plate and bent at right angles therewith, a cylinder, antifriction-bearings located between the bolt and the surrounding cylinder, and the cap-pieces; substantially as described.

4. A rub-iron for vehicles comprising a supporting-plate, a bolt, a cylinder, antifriction-bearings located between the bolt and the surrounding cylinder, the cap-pieces, and the antirattler-springs; substantially as described.

GIDEON LE SAGE.

In presence of—
CHAS. J. ELLIS,
JAS. E. KNIGHT.