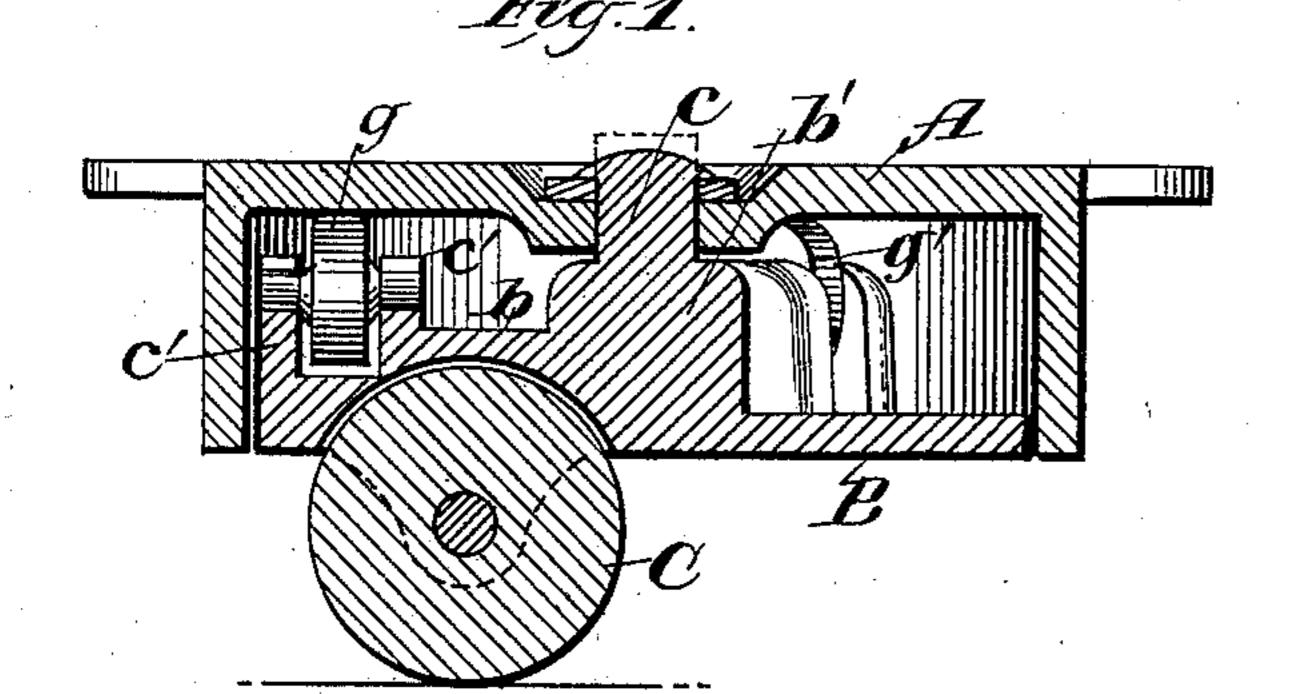
(No Model.)

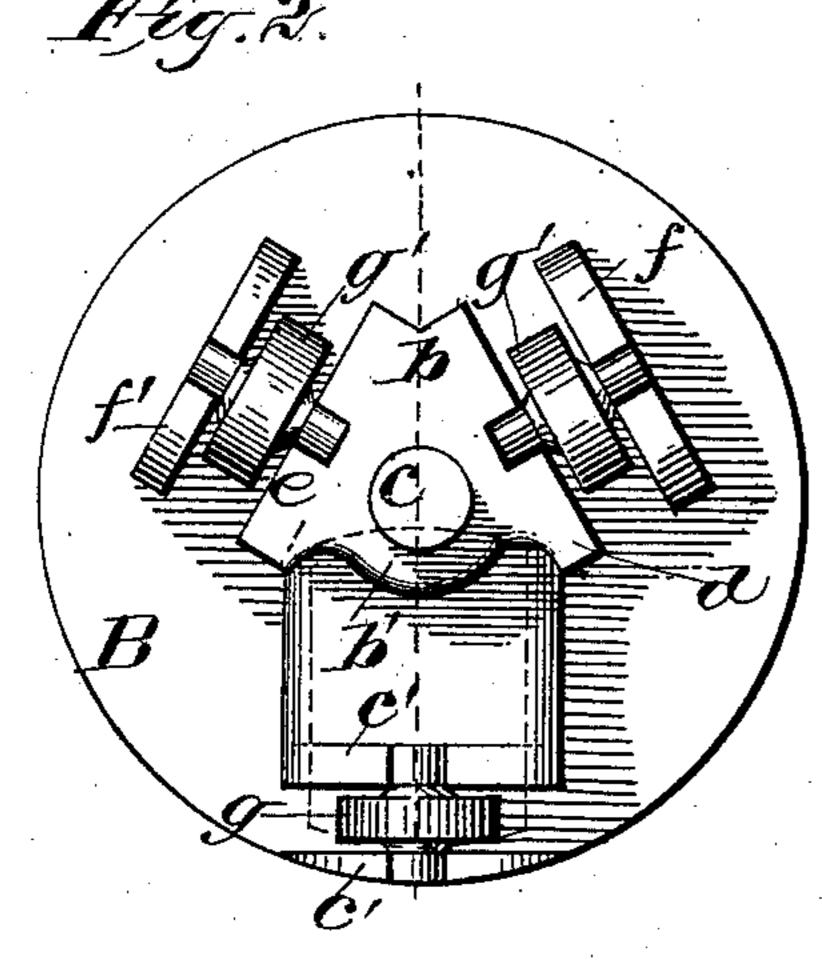
## J. P. CARMICHAEL.

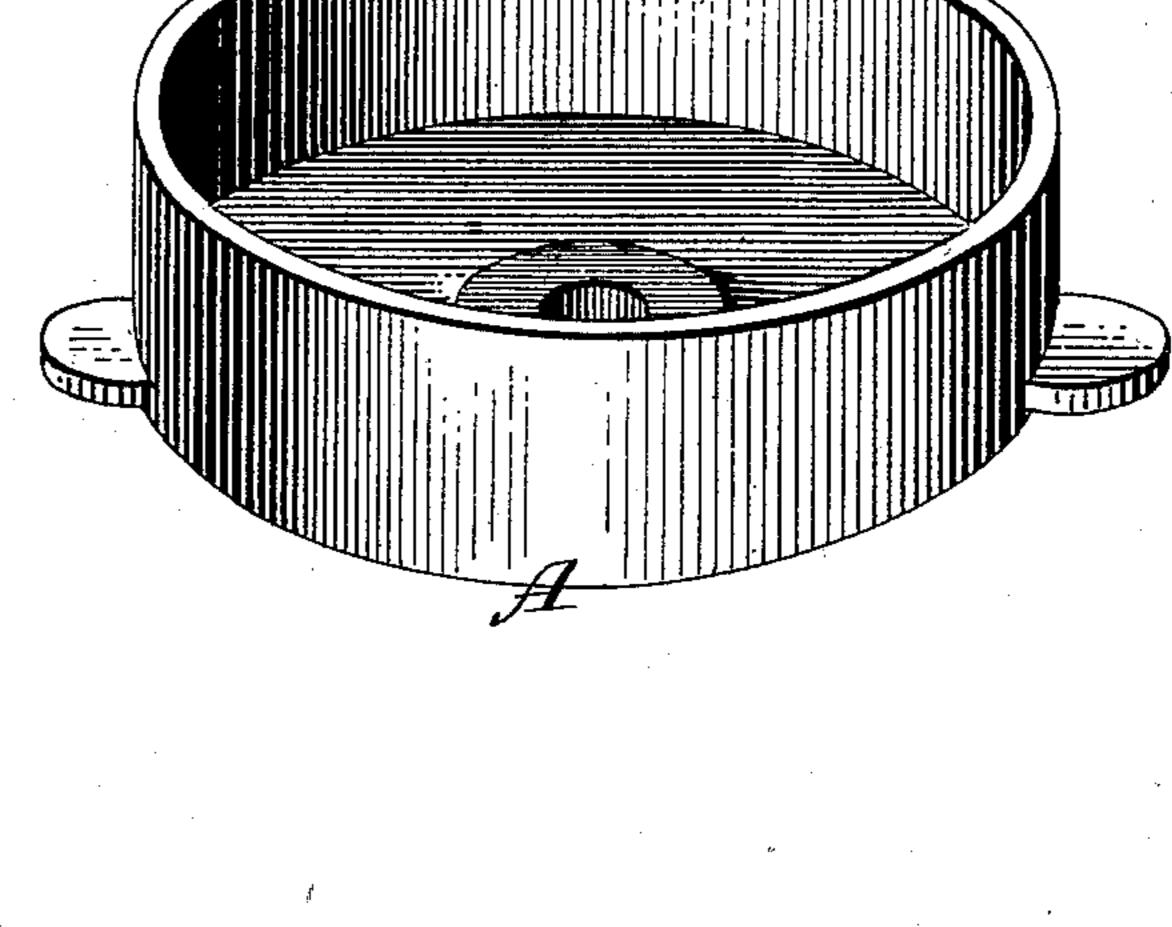
TRUNK OR FURNITURE CASTER.

No. 381,759.

Patented Apr. 24, 1888.







## United States Patent Office.

JOHN P. CARMICHAEL, OF MILWAUKEE, WISCONSIN.

## TRUNK OR FURNITURE CASTER.

SPECIFICATION forming part of Letters Patent No. 381,759, dated April 24, 1888.

Application filed July 23, 1885. Serial No. 172,387. (No model.)

To all whom it may concern:

Be it known that I, John P. Carmichael, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Trunk or Furniture Casters; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to trunk or furniture casters; and it consists in a plate or frame having a spindle, with an anti-friction wheel or wheels sustained adjacent thereto, and another anti-friction wheel moving in a circle outside the line of motion of the first-named wheel or wheels, in combination with a roller journaled beneath a point between the last named anti-friction wheel and the spindle, as will be fully described hereinafter.

In the drawings, Figure 1 is a vertical sec-20 tion through the center of my caster. Fig. 2 is a plan view of the bottom plate. Fig. 3 is a perspective of the bottom plate, and Fig. 4 is a perspective view of the base-plate inverted.

A is the base-plate, which is of inverted-cup shape, and B is the bottom plate. This latter is formed with a raised portion, b, having a hub, b', that terminates in a spindle, c, and also has bearing-lugs c' de, while other bearing-lugs, ff', extend up from the base-plate adjacent to lugs d and e, respectively. The trunnions of each of the anti-friction wheels g g' g' are supported in notches in each pair of lugs, and these wheels are designed to receive the bottom of the base-plate, while spindle c projects up through said base-plate and is secured thereon by a suitable head, as shown, for instance, in Fig. 1.

O is the main roller-wheel, which is designed for contact with the floor, and the axis of this wheel is under a point about midway between the center of the wheel g and the vertical center of spindle c, so that the weight carried by the caster will be evenly balanced between the spindle and this roller, while the rollers g' will

prevent the spindle from cramping in the baseplate when the weight comes on the caster on the opposite side of the spindle from the wheel g. Therefore there are no binding-points in my caster, and cramping is impossible. By my construction the chief weight or pressure 5c comes on the wheels g'g', which are nested together about the pivotal point c, and hence the wheel g is largely relieved from said weight or pressure by moving in a circle which is outside of the line of rotation of the said wheels g'g', 55 and therefore is enabled to exert nearly its whole force just where needed—that is, adjacent to the roller C—and this also relieves the wear and tear on the bearing or pivotal point c.

My caster is especially useful with very heavy 60 articles of furniture—such as pianos, heavy trunks, sideboards, and the like—and also very useful for trucks. I have shown two wheels nested about the pivotal point, making three anti-friction wheels in all; but I may use more 65 or less, keeping in mind that the wheel nearest the roller C is to move in a line outside of the line of motion of the other wheel or wheels.

Having thus described my invention, what I claim as new, and desire to secure by Letters 70 Patent, is—

In a caster, a bottom plate having a spindle, with an anti-friction wheel or wheels sustained adjacent thereto, and another anti-friction wheel moving in a circle outside the line of 75 motion of the first-named wheel or wheels, in combination with a roller journaled beneath a point between the last-named anti-friction wheel and the spindle, substantially as set forth.

In testimony that I claim the foregoing I 8c have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

JOHN P. CARMICHAEL.

Witnesses:

H. G. UNDERWOOD,

G. A. PLATZ.