

(No Model.)

H. J. PHELPS,
METALLIC FLASK.

No. 420.664.

Patented Feb. 4, 1890.

Fig-1-

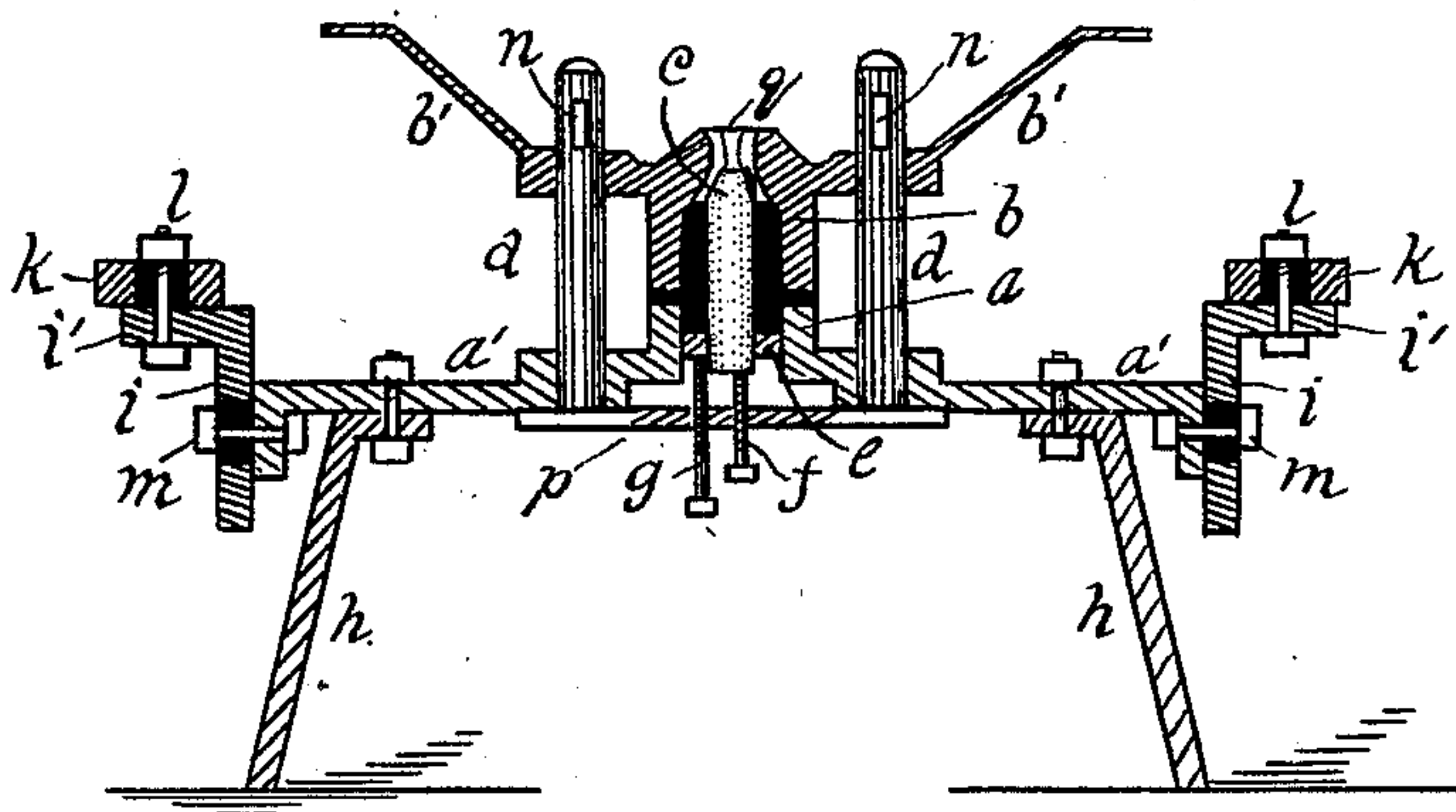
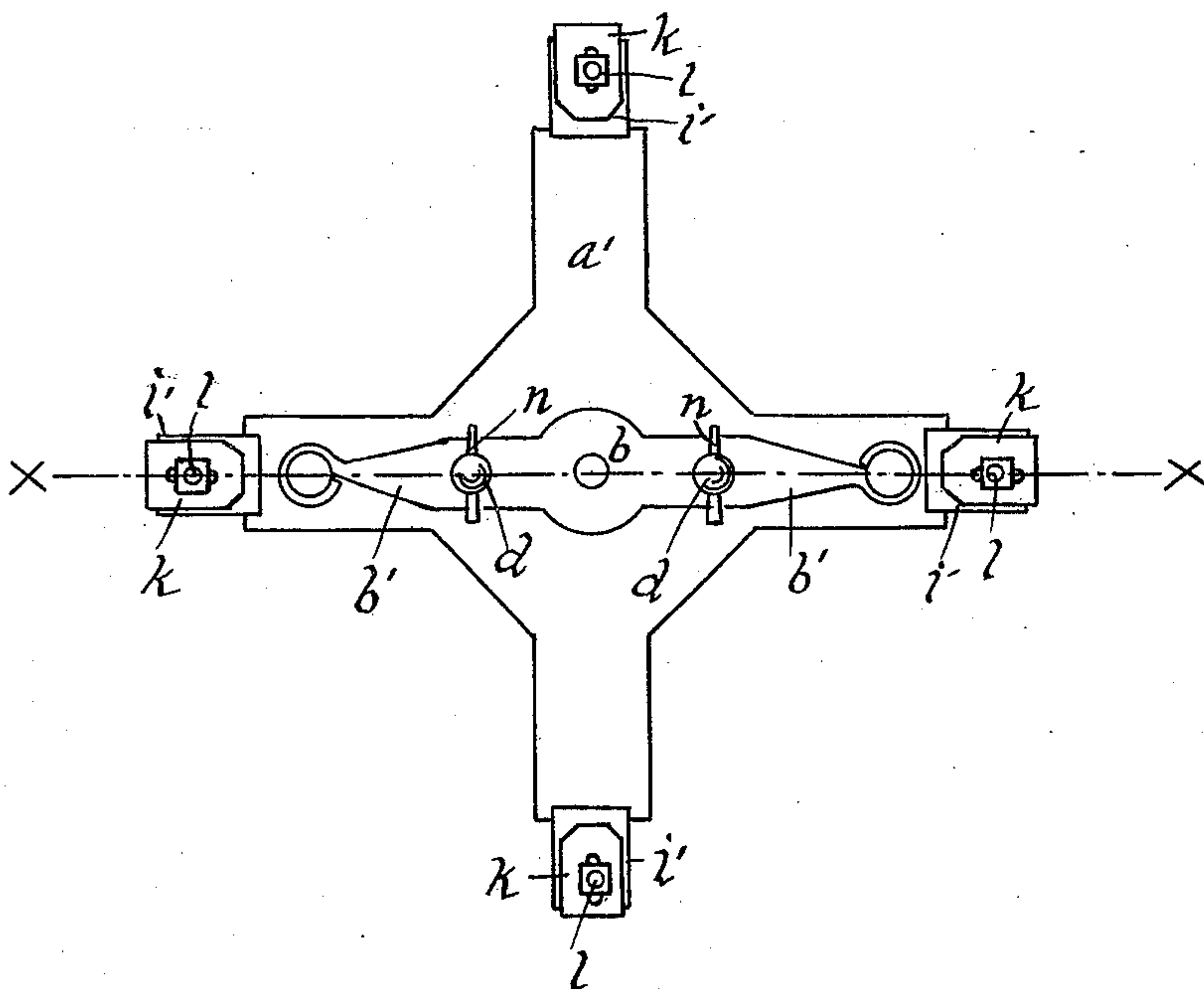


Fig. 2.



ATTEST.

Helen Graham

H. H. Graham

INVENTOR

HARVEY J. PHELPS.

By L. P. Graham
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UNITED STATES PATENT OFFICE.

HARVEY J. PHELPS, OF HAVANA, ILLINOIS, ASSIGNOR TO THE HAVANA
PRESS DRILL COMPANY, OF SAME PLACE.

METALLIC FLASK.

SPECIFICATION forming part of Letters Patent No. 420,664, dated February 4, 1890.

Application filed November 1, 1889. Serial No. 328,909. (No model.)

To all whom it may concern:

Be it known that I, HARVEY J. PHELPS, of Havana, in the county of Mason and State of Illinois, have invented certain new and useful
5 Improvements in Metallic Flasks, of which the following is a specification.

My invention is designed to be used for casting wheel-hubs; and it consists in the details of construction and combinations of parts
10 hereinafter set forth and claimed.

In the drawings accompanying and forming a part of this specification, Figure 1 is a sectional view of my device on broken line *x* in Fig. 2.

15 The drag *a* has the frame *a'* extending radially in different directions. The cope *b* has the handles *b' b'*, and it is adapted to the guide-pins *d d* of the drag. The collar *e* is adapted to the inner circumference of
20 the drag, and it has the adjusting-bolt *g*, that extends through the bar *p*. Bolt *f* extends through the bar *p*, and provides means for adjusting the position of the core *c*. Brackets *i* are secured to frame *a'* by bolts *m*, and they
25 are slotted in order to provide vertical adjustment. They have the horizontal extensions *i'*, through which extend bolts *l*, and the slotted blocks *k* are horizontally adjustable on such extensions by means of such bolts.

30 The legs *h* provide means for supporting the device.

In operation the brackets *i* are adjusted vertically and the blocks *k* horizontally to conform to the sweep of a trammel centered
35 in the flask and describing the size and desired vertical position of the rim of the wheel.

The collar *e* is adjusted to give the hub the desired length, and the bolt *f* is adjusted to regulate the position of the core. The core is then put in place, the cope is placed on the
40 drag and secured by keys *n*, and the metal is poured through sprue *q* and around the ends of the spokes of the wheel in the customary manner.

By means of the brackets and blocks the
45 rim of the wheel may be placed in true concentricity with the flask and perfectly horizontal, and the adjustable and removable collar enables the shape of the end of the hub to be varied by interchange of collars and
50 the lengths of the hub to be varied by adjusting the bolt.

I claim as new and desire to secure by Letters Patent—

1. In combination with a metallic flask for
55 casting wheel-hubs, a collar adapted to the internal circumference of the flask and to the external surface of the core, a screw for adjusting the collar lengthwise of the flask, and a separate screw for adjusting the core in
60 like manner, as set forth.

2. In combination with a metallic flask for casting wheel-hubs, a set of vertically-adjustable brackets disposed concentrically
65 around the flask and horizontally-adjustable blocks on the brackets, as set forth.

In testimony whereof I sign my name in the presence of two subscribing witnesses.

HARVEY J. PHELPS.

Attest:

W. H. RHODES,
ISAAC N. MITCHELL.