

No. 612,942.

Patented Oct. 25, 1898.

C. C. BRADLEY.
THILL COUPLING.

(Application filed Nov. 22, 1897.)

(No Model.)

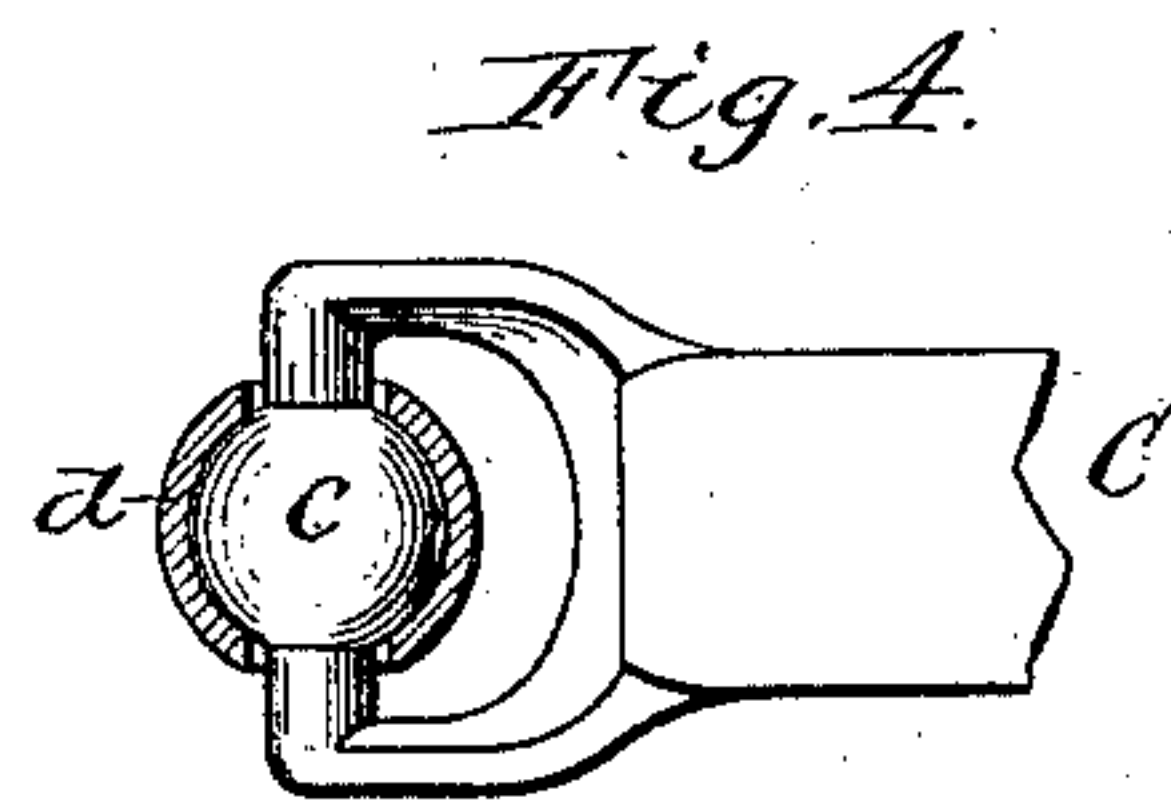
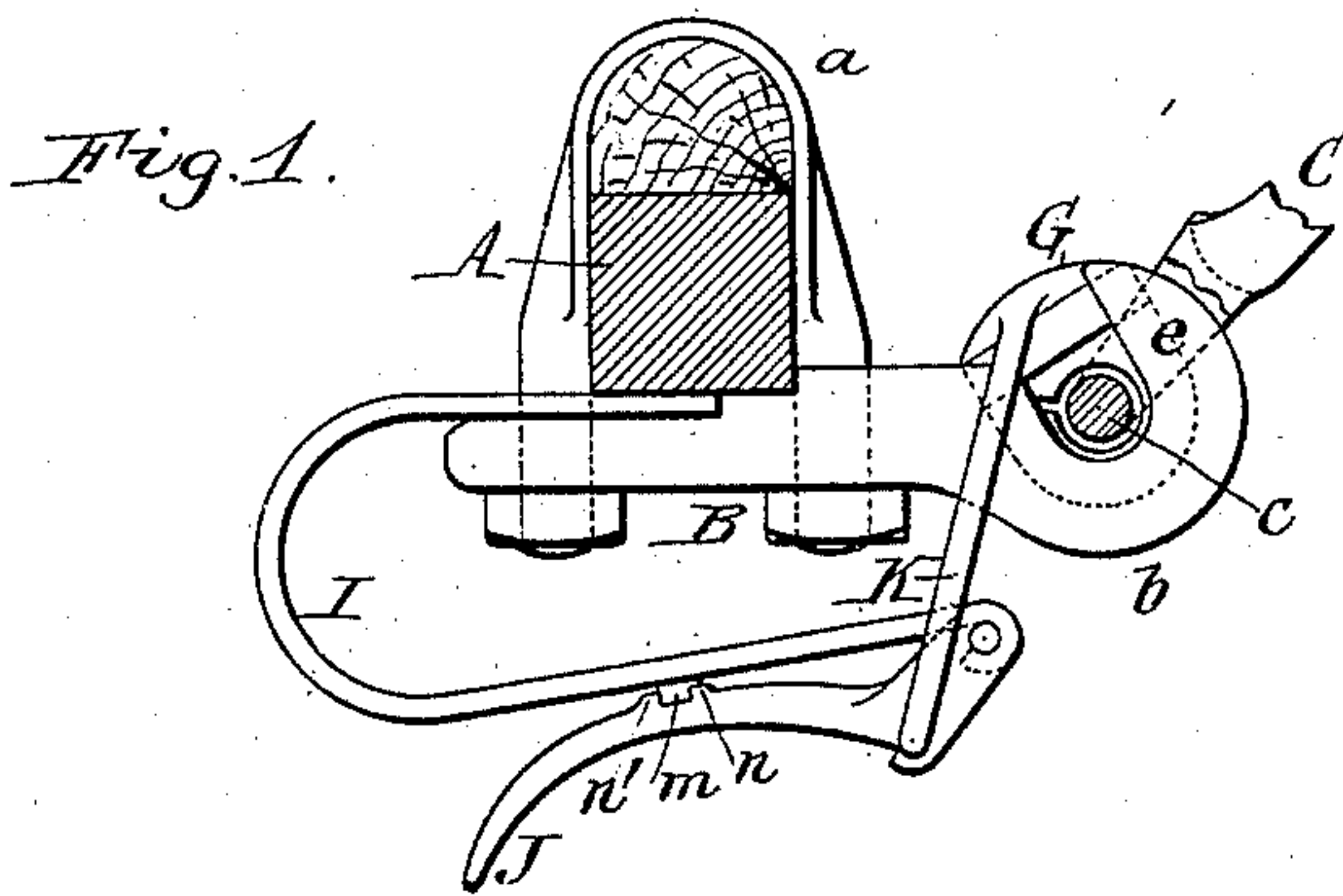


Fig. 5.

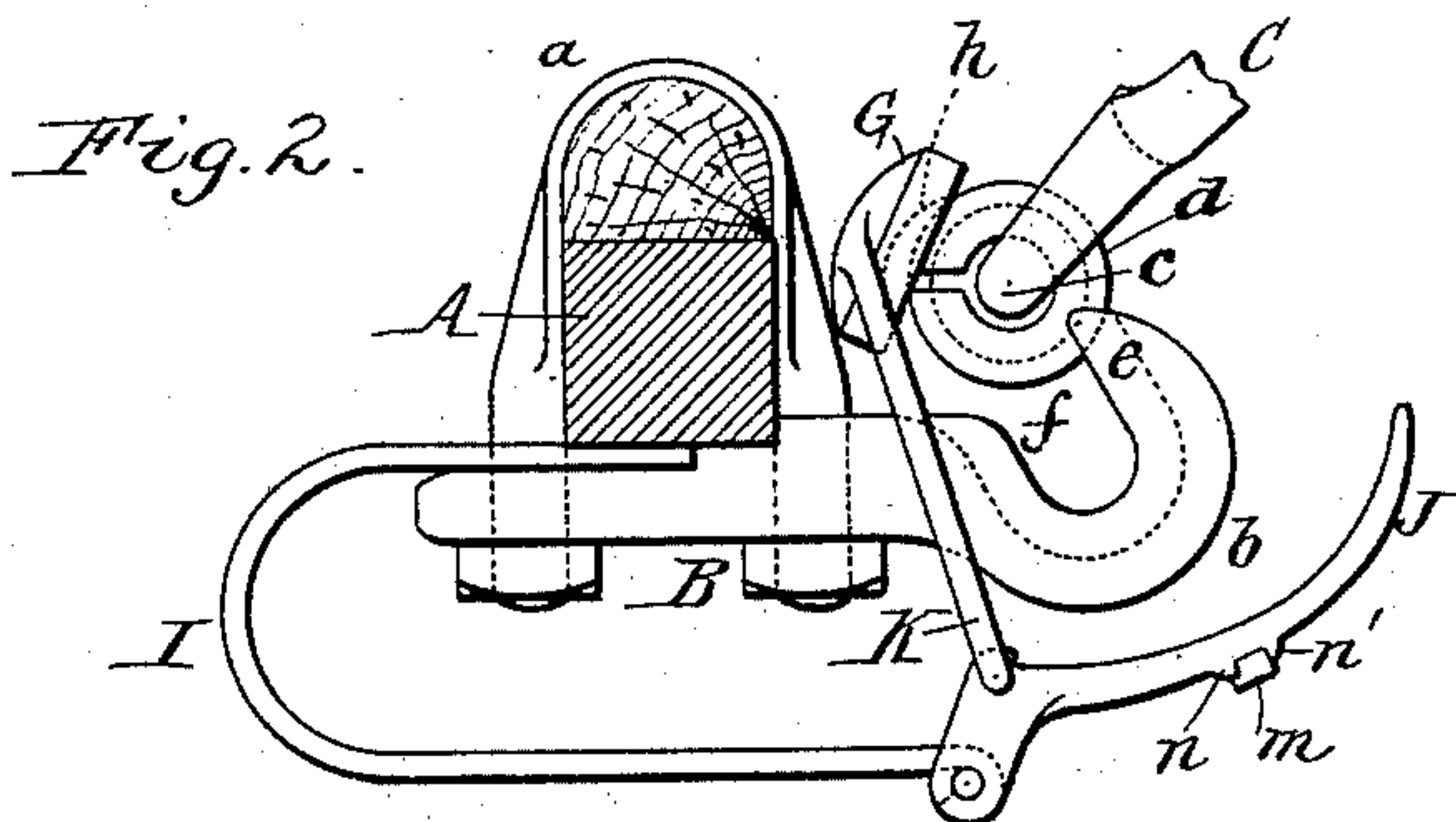
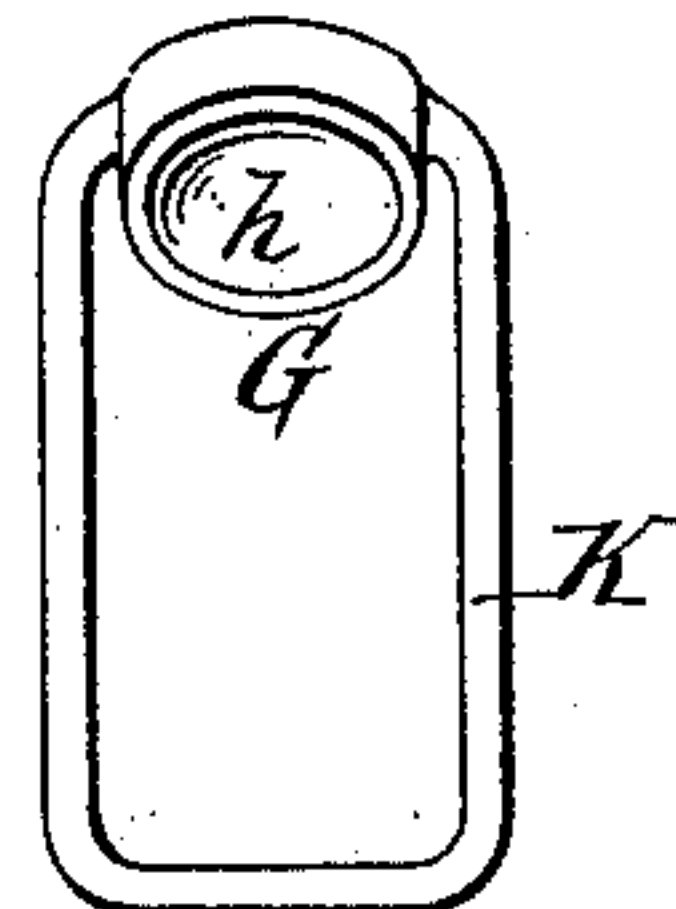


Fig. 6.

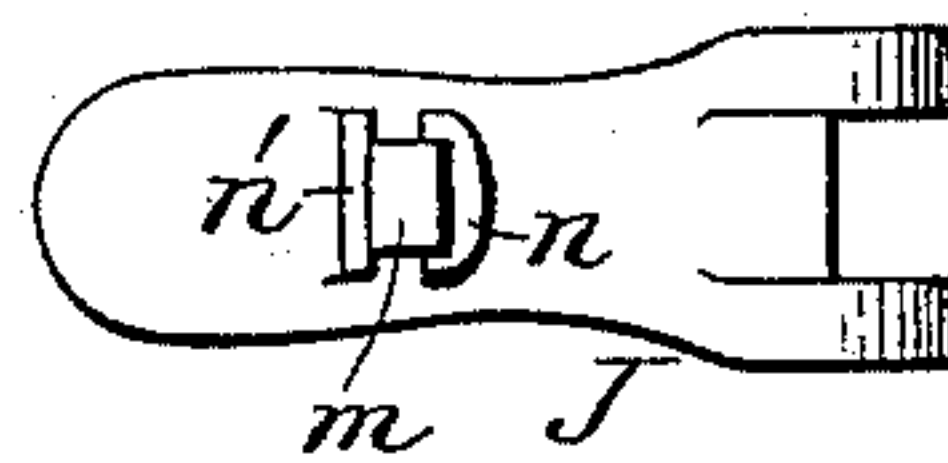
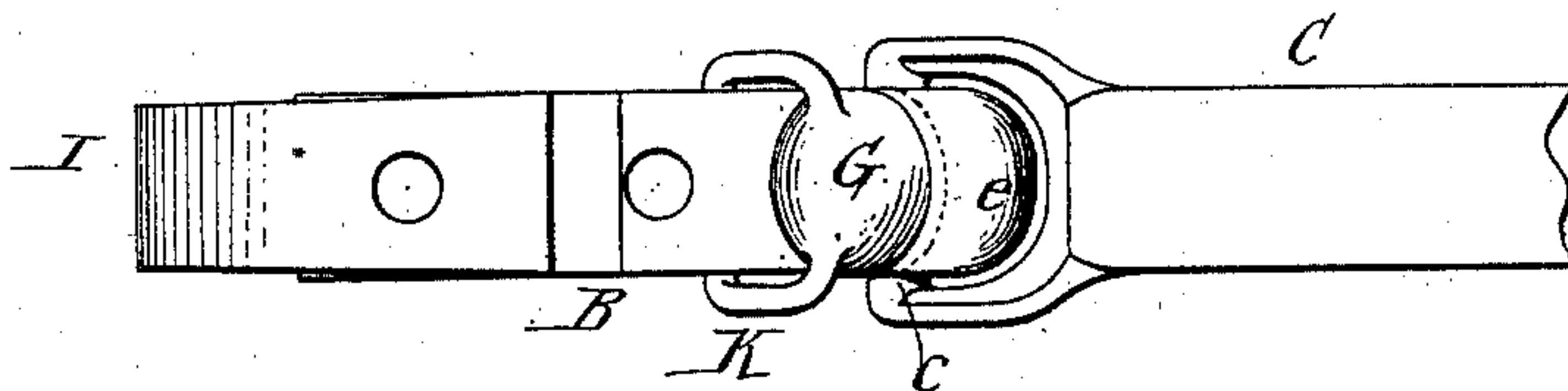


Fig. 3.



WITNESSES:

Henry L. Deck.
Chas. F. Burkhardt.

C. C. Bradley, INVENTOR.

by Wilhelm & Zorn, ATTORNEYS.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHRISTOPHER C. BRADLEY, OF SYRACUSE, NEW YORK, ASSIGNOR TO
CHRISTOPHER C. BRADLEY, JR., OF SAME PLACE.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 612,942, dated October 25, 1898.

Application filed November 22, 1897. Serial No. 659,418. (No model.)

To all whom it may concern:

Be it known that I, CHRISTOPHER C. BRADLEY, a citizen of the United States, residing at Syracuse, in the county of Onondaga, in the State of New York, have invented a new and useful Improvement in Thill-Couplings, of which the following is a specification.

This invention relates to that class of thill-couplings in which the movable jaw of the draft-eye is held in a closed position by a spring, a clamping or tightening lever attached to the spring, and a bail, link, or tie connecting the lever with the movable jaw of the draft-eye. A thill-coupling of this general character is shown, for instance, in Re-issued Letters Patent No. 11,260, granted to William Herbert Hannan, dated August 16, 1892.

The object of my invention is to simplify the construction of the coupling and to cause the movable part or jaw of the draft-eye to be moved bodily to and from the stationary part by operating the lever, thereby facilitating the manipulation of the coupling.

In the accompanying drawings, Figure 1 is a side elevation of my improved thill-coupling with the draft-eye closed. Fig. 2 is a similar view showing the draft-eye open and the wrist of the thill-iron partly removed. Fig. 3 is a top plan view of the parts in this position. Fig. 4 is a fragmentary plan view of the thill-iron and its wrist. Fig. 5 is a front view of the movable part or cap of the draft-eye and the link formed integrally therewith. Fig. 6 is a top plan view of the tightening-lever.

Like letters of reference refer to like parts in the several figures.

A represents the front axle of a vehicle; B, the draft-eye, secured to the under side of the same by a clip *a* or otherwise and provided at its front end with a hook-shaped stationary jaw *b*.

C is the thill-iron, and *c* the wrist or knuckle of the same, which may be of any suitable form or construction, that shown in the drawings being of spherical form and covered by a correspondingly-shaped washer *d*. The front portion *e* of the stationary jaw extends

upwardly and rearwardly, and the recess *f* of the stationary jaw opens upwardly and rearwardly, so that the wrist of the thill-iron can be dropped into the recess behind the front portion of the stationary jaw. This recess is shaped so as to receive the wrist of the thill-iron.

G represents the movable jaw or cap of the draft-eye, which closes the recess of the stationary jaw and bears upon the wrist resting in the latter. The movable jaw or cap is for that purpose shaped so as to enter the upper portion of this recess between the front and rear portions of the stationary jaw and is provided in its under side with a recess of the proper form to fit upon the upper portion of the wrist. When the wrist is spherical, as shown, the recess in the under side of the cap is correspondingly spherical, as shown at *h*. This movable jaw or cap is detached from the stationary jaw, so that it can be moved bodily toward and from the same.

I represents the bent spring, which is secured at its upper end to the axle and the draft-eye, as shown, or to either part alone, as may be preferred, and which projects with its lower free portion forwardly below the draft-eye and carries at its free front end the clamping or tightening lever J.

K represents the link, bail, or tie, which connects this lever with the movable jaw or cap of the draft-eye. This link straddles the draft-eye and is pivoted at its lower end to the tightening-lever and attached with its upper end to the movable jaw or cap. The latter is formed integrally with the link, as shown, preferably by drop-forging.

m represents a buffer, of rubber, leather, or other suitable material, which is secured to the upper side of the tightening-lever by any suitable means and which bears against the under side of the spring when the lever is in its tightened position and prevents contact of the lever with the spring and the rattling resulting therefrom. This yielding buffer may be secured to the lever by flanges *n n'*, formed on the lever, and closed against the buffer by a cold shut, as shown in Figs. 1 and 6.

When the tightening-lever is released, it holds the movable cap of the draft-eye above the lower stationary jaw thereof at a sufficient height to permit of the introduction of the
5 wrist into the recess of the lower jaw, as shown in Fig. 2. By tightening the lever the cap is drawn down into the recess of the lower jaw and upon the wrist, as shown in Fig. 1. Upon releasing the lever the cap is raised out
10 of the recess and from the wrist by the movement of the lever. This construction of the coupling dispenses with a hinge connection between the movable and stationary parts of the draft-eye and avoids the necessity of mov-
15 ing the movable jaw independently of the clamping device, and thereby prevents the annoyances resulting from such hinge connection—for instance, when the coupling has remained in a locked position for a long time,
20 in which case the hinge often becomes tight by dirt and rust, so that it is very difficult to open the draft-eye. The above-described con-

struction also simplifies the coupling and reduces its cost.

I claim as my invention—

25 The combination with the stationary jaw of the draft-eye provided with an upwardly and rearwardly opening recess for the reception of the wrist of the thill-iron, of a link which straddles said jaw, a cap formed integrally
30 with said link at the upper end thereof and adapted to enter the upper portion of said recess, a tightening-lever pivotally connected with the lower end of said link, and a clamp-
35 ing-spring which is secured at one end and carries said lever at its free end, substantially as set forth.

Witness my hand this 15th day of November, 1897.

CHRISTOPHER C. BRADLEY.

Witnesses:

F. L. SCHARFF,
CALVIN S. BUNNELL.