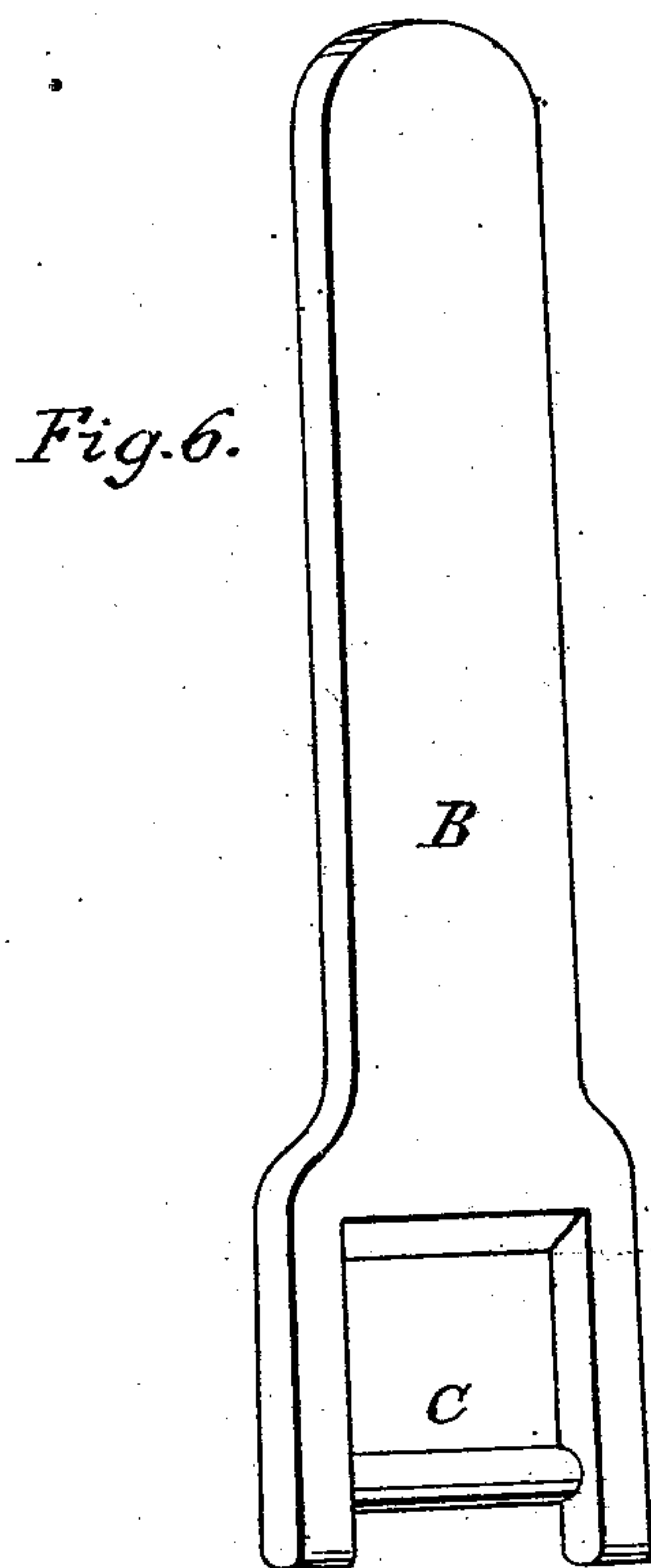
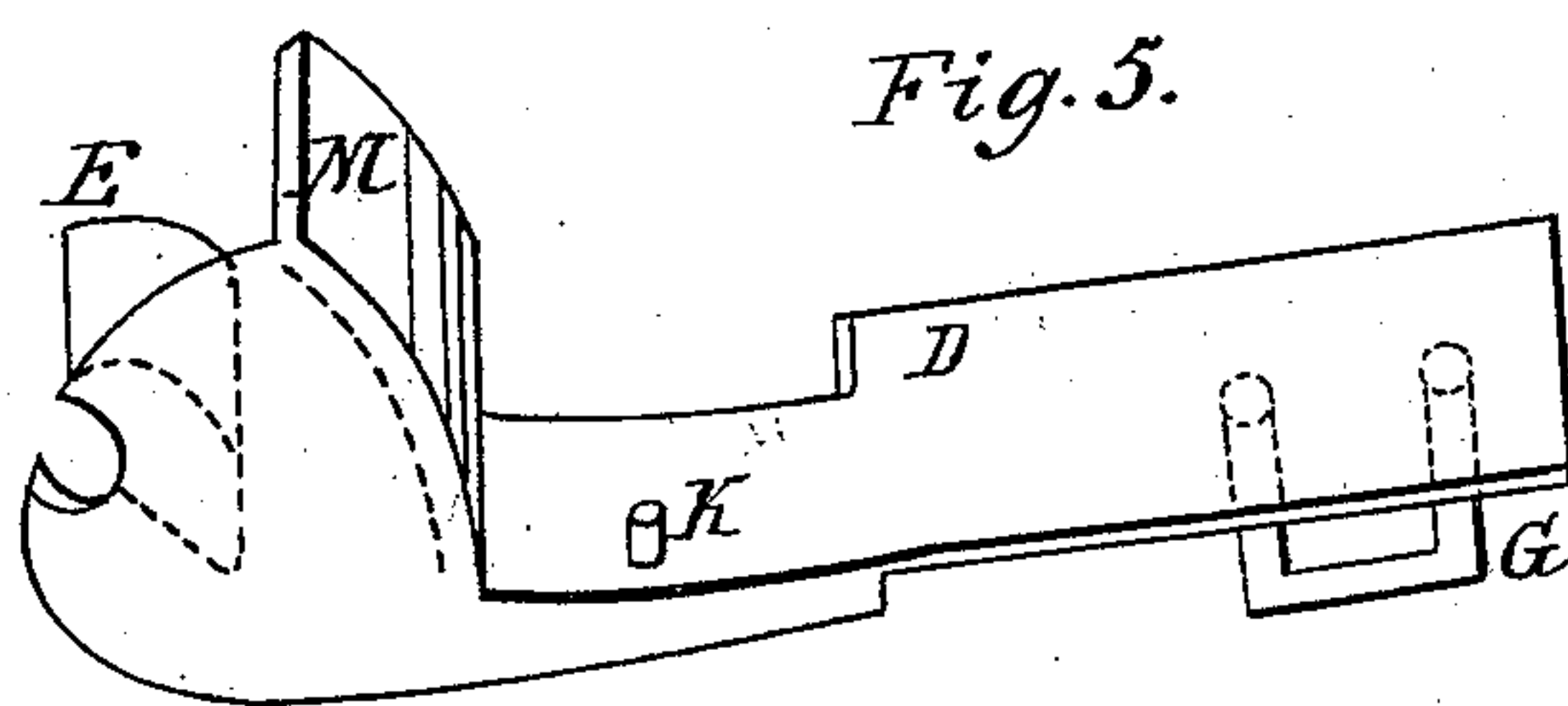
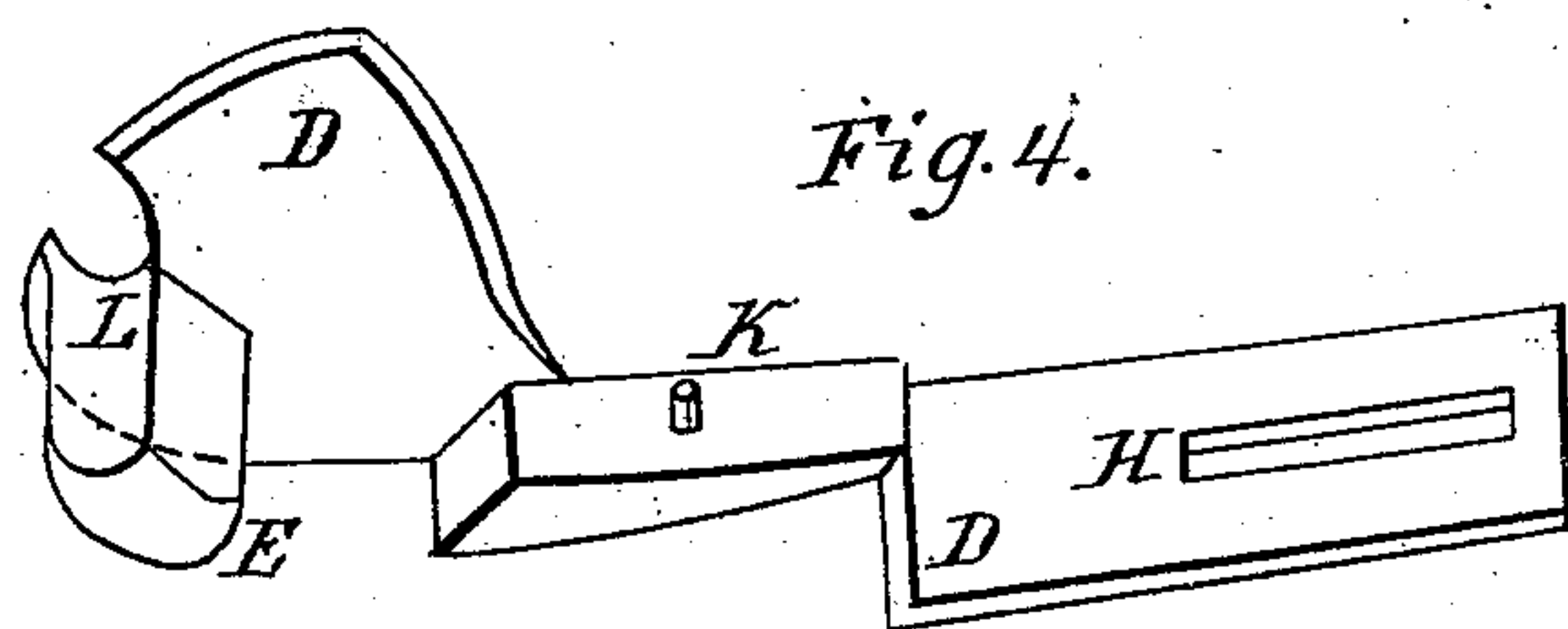
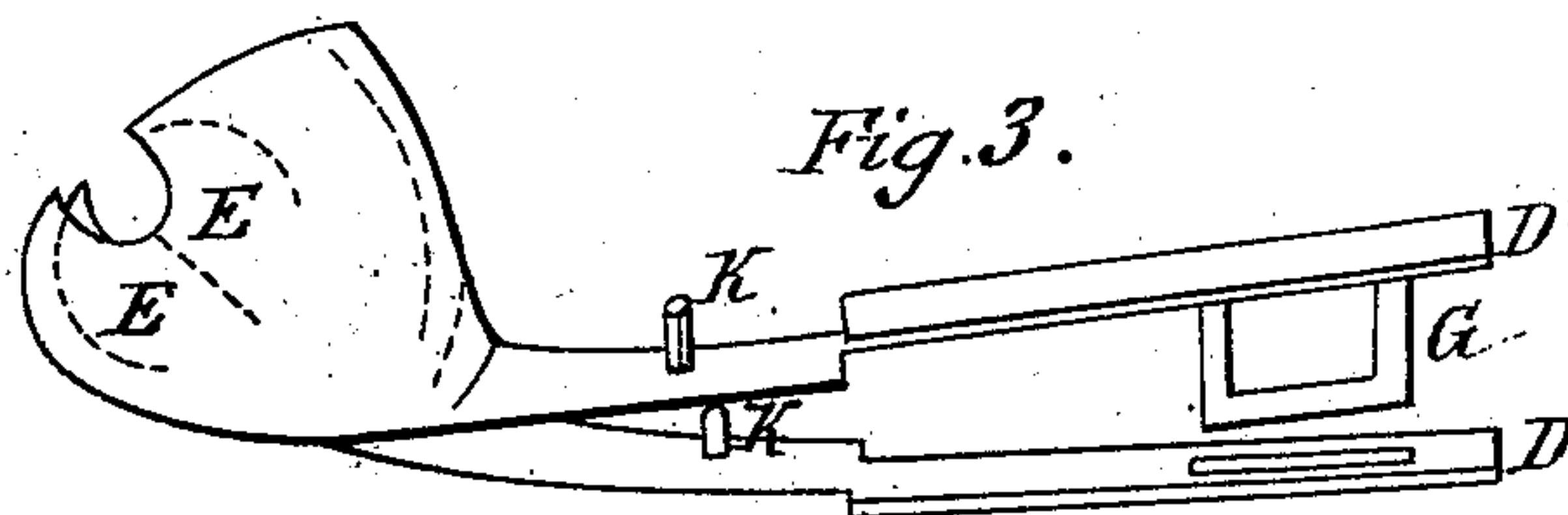
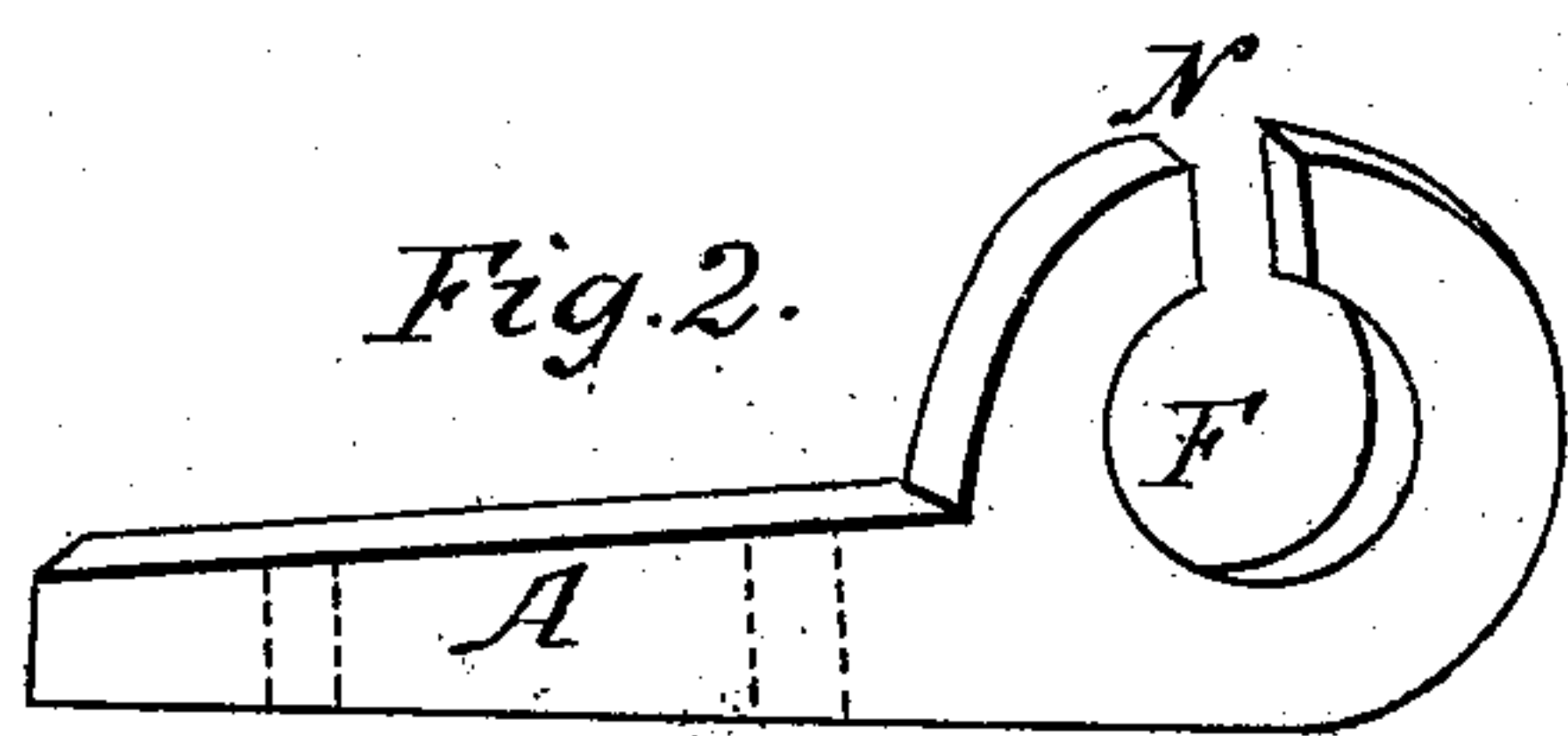
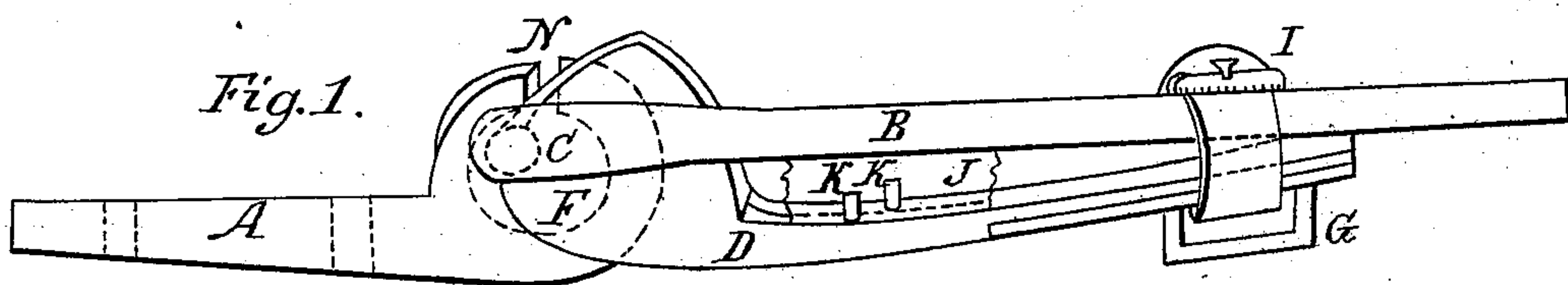


E. F. SHOENBERGER.

Thill-Coupling.

No. 17,751.

Patented July 7, 1857.



UNITED STATES PATENT OFFICE.

EDWIN F. SHOENBERGER, OF GERMANTOWN, PENNSYLVANIA.

SHAFT-COUPLING.

Specification of Letters Patent No. 17,751, dated July 7, 1857.

To all whom it may concern:

Be it known that I, EDWIN F. SHOENBERGER, of Germantown, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Shaft-Couplings for Carriages; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention is the combination and arrangement of the levers attached to the eye of the jack of carriage axles, and to the shaft iron for the purpose of preventing rattling, and for safety.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation—to wit:

Figure 1 represents the combined coupling A, the axle iron B, the shaft iron, with its round bolt C, which operate together with the double levers D and their roller E in the eye of axle iron A.

Fig. 2 represents the axle iron A with its eye F, and may be attached to a carriage by screws or otherwise.

Fig. 3 represents the levers D with their roller E combined and fitting into each other; one of the levers D having a clip G attached, which fits into the slot H of its corresponding lever D, and through which clip G a strap and buckle I is passed, and buckled around the levers D and shaft iron B—so as to hold the gum elastic spring J to its place, and likewise prevent rattling. The pins K on the upper side of levers D, likewise hold the gum elastic spring J firmly in its place.

Fig. 4 shows the shape of one of the levers D, with its half roller E. This half roller E when fitted into its corresponding half roller E of the opposite lever D, forms one complete roller, having a semicircular groove L, along the whole length of roller E for the bolt C to rest in. The ends of roller E are solid with the levers D and revolve around the bolt C by the raising or

lowering of the levers D. This roller E performs a double purpose—first it prevents any rattling, and secondly, the pressure of the levers D against the gum elastic spring J and shaft iron B, or by the parting of the outer ends of the levers D, this roller E in the eye F of the jack A, clamps or grips the bolt C and holds it firmer and tighter, and prevents the bolt C from disconnecting itself from the eye F—and an important object is accomplished, by these levers D and roller E holding the bolt C of shaft iron B, back against the back part of the eye F of jack A when in a working position—so that the bolt C does not work in the center of the roller but at its back side, and thus prevents wearing and rattling.

Fig. 5 represents the corresponding lever D with its half roller E and clip G. The front ends of levers D are flat and when joined together, lap over each other, while the back ends form a circular box M which encompasses the front sides of the jack A, and whenever the shaft is to be attached to a carriage, the levers D are lowered until the groove L of roller E is set opposite to the opening N of the eye F and the bolt C of the shaft iron B is dropped into the groove L (the shaft being in any position) the levers D are then buckled to the shaft and the shaft is secure and safe, even though the strap and buckle I (which is for the purpose of holding the gum elastic spring J to prevent rattling) break, the shaft can not disconnect itself from the jack A.

Fig. 6 represents the shaft B with its bolt C.

What I claim as my invention, and desire to secure by Letters Patent is—

The combination and arrangement of the levers D, D, with their half roller E, box M, clip G, and slot H, substantially as described, for the purpose of being applied to shaft couplings, for safety and to prevent rattling.

EDWIN F. SHOENBERGER

Witnesses present at signing:

WILLIAMS OGLE,
T. MAYARGE.