

A. C. KASSON.

Hinges.

No. 134,383.

Patented Dec. 31, 1872.

Fig 1.

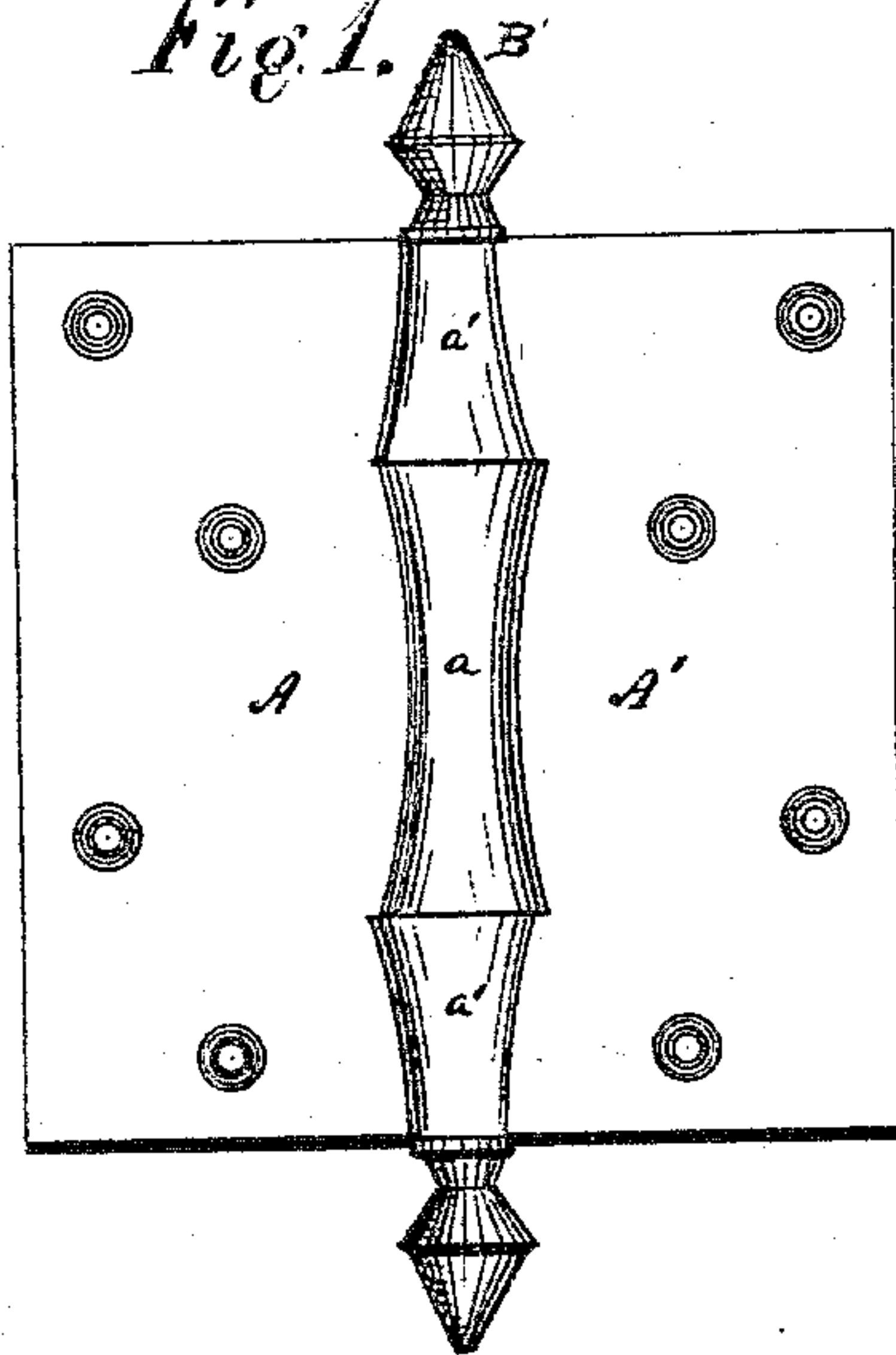


Fig 2.

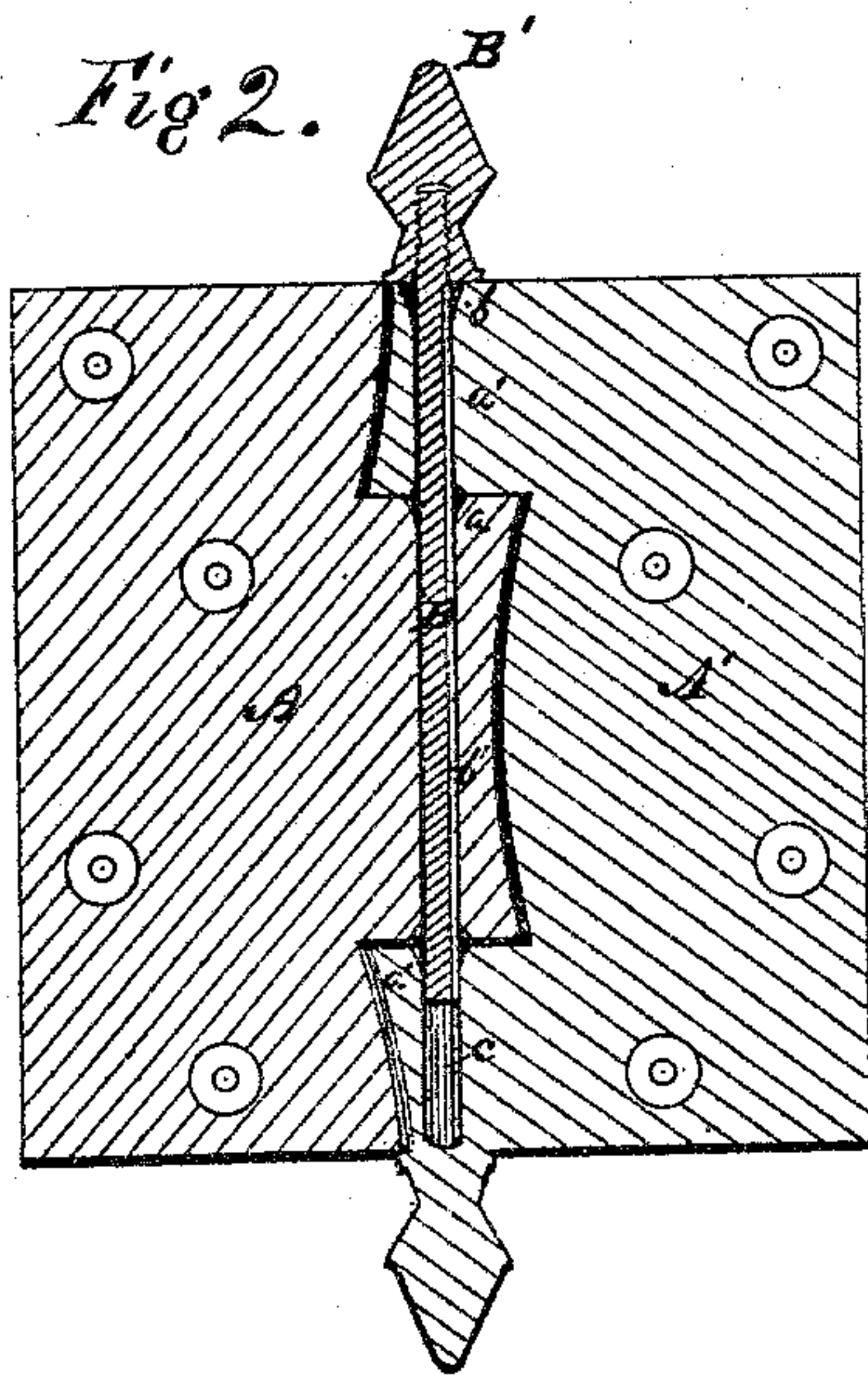
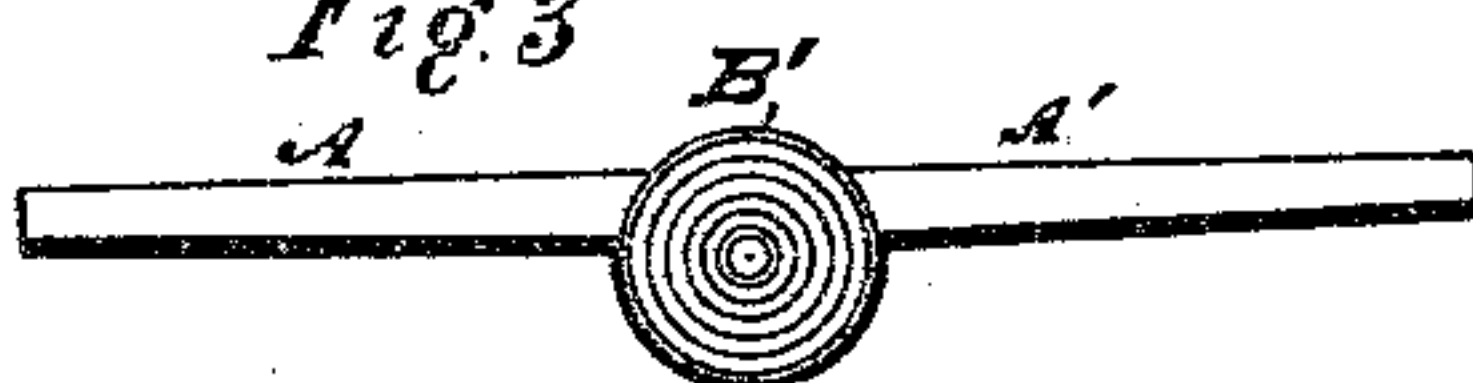


Fig 3



Witnesses

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AMASA C. KASSON, OF MILWAUKEE, WISCONSIN.

IMPROVEMENT IN HINGES.

Specification forming part of Letters Patent No. 134,383, dated December 31, 1872.

To all whom it may concern:

Be it known that I, AMASA C. KASSON, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Hinges, of which the following is a full, clear, and exact description, which will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing forming a part of this specification, and in which—

Figure 1 represents a side elevation of my improved hinge; Fig. 2, a vertical central section of the same; and Fig. 3, a top view thereof.

Like letters of reference indicate like parts.

The object of my invention is to improve the construction and operation of that class of hinges provided with removable pintles; and to that end it consists in providing the pintle with one or more grooves, and the wings of the hinge with an oil-cup arranged and constructed to receive and extend below the pintle; it further consists, in connection with a pintle and hinge so constructed, in reaming out the perforations and oil-cup which receive the pintle, all of which will be hereinafter more fully described and set forth.

In the drawing, A A' represents the wings of the hinge. *a* is a knuckle on the wing A, and *a'* *a'* are knuckles on the wing A'. All the knuckles are made to receive the pintle, as shown in Fig. 2. The upper knuckle *a'* is reamed out at the top of its perforation so as to form a funnel for the reception of oil and remove the sharp edge of the knuckle from contact with the pintle, as shown at *b*. The ends of the perforation of the knuckle *a* are also reamed out so as to readily receive the pintle, prevent its contact with sharp edges, and conduct the oil to the cup. *c* is an oil-cup in the lower knuckle *a'*. This oil-cup receives the lower end of the pintle and extends a considerable way below it, so that the surplus oil will enter the cup instead of overflowing at the joints, and so that the oil therein will lubricate the pintle; the cup is also reamed out at the top for the purposes mentioned, and also to increase its capacity. B is a pintle wholly removable from the hinge, and *b'* is a groove in the pintle cut longitudinally therein. B' is the pintle-cap, which is suffi-

ciently large to cover the funnel made at the upper end of the upper knuckle *a'*. The knuckles are enlarged at their bearings or points of contact with each other, as shown, and they are also set upon the wings in such a manner that when the latter are folded together they cannot slide upon each other in any direction, and so that the hinge may be used as a "right and left" hinge, as may be perceived from reference to Figs. 1 and 3.

The advantage of the grooved pintle is that a larger quantity of oil is retained in the joint and distributed, and this advantage is increased by reason of the oil-cup arranged to receive and extend below the pintle, the surplus oil flowing into the cup instead of overflowing at the joints. The oil in the cup is also fed to different parts of the joint through the medium of the groove. By reaming out the knuckle-perforations and the top of the oil-cup the oil is not only readily conducted to the cup and the capacity of the latter increased, but the pintle is readily inserted, and the sharp edges of the knuckles prevented from wearing shoulders upon the pintle, which knuckles so made have heretofore prevented the removal of the pintle, especially in that class of pintles known as "slip-pintles." The broad butts or bearings of the knuckles lessen the strain upon the pintle and prevent the hinges from being readily pried apart when the pintle is removed.

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

1. A removable pintle, provided with one or more grooves for the purpose of lubricating the pintle and the knuckles or bearings, in combination with the wings of a hinge provided with an oil-cup, which receives and extends below the pintle, substantially as specified.

2. A hinge, having its wings constructed to receive a removable grooved pintle, and provided with an oil-cup which receives and extends below the pintle, when the perforations or cups in the knuckles are reamed out, substantially as and for the purpose described.

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