

A. C. KASSON.

Hinges.

No. 134,383.

Patented Dec. 31, 1872.

Fig 1.

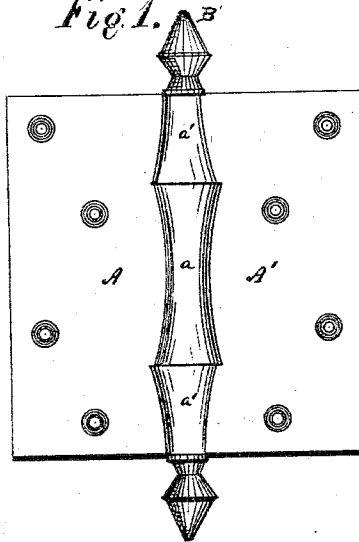


Fig 2.

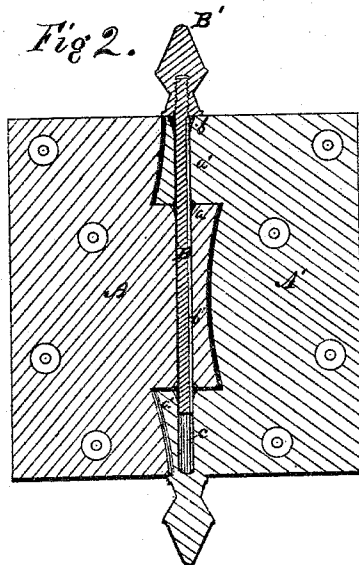
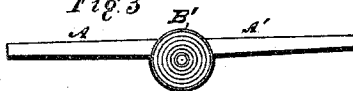


Fig 3



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 pindle with one or more grooves, and the wings of the hinge with an oil-cup arranged and constructed to receive and extend below the pindle; it further consists, in connection with a pindle and hinge so constructed, in reaming out the perforations and oil-cup which receive the pindle, 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 pindle, 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 pindle, as shown at *b*. The ends of the perforation of the knuckle *a* are also reamed out so as to readily receive the pindle, 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 pindle 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 pindle; the cup is also reamed out at the top for the purposes mentioned, and also to increase its capacity. B is a pindle wholly removable from the hinge, and *b'* is a groove in the pindle cut longitudinally therein. B' is the pindle-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 pindle 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 pindle, 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 pindle is readily inserted, and the sharp edges of the knuckles prevented from wearing shoulders upon the pindle, which knuckles so made have heretofore prevented the removal of the pindle, especially in that class of pintles known as "slip-pintles." The broad butts or bearings of the knuckles lessen the strain upon the pindle and prevent the hinges from being readily pried apart when the pindle is removed.

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

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

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

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