

Adams & Peckover.

Coach Hinge.

No 30,555.

Patented Nov. 6, 1860.

FIG 2.

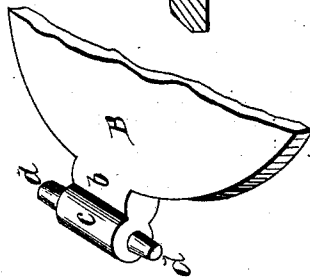
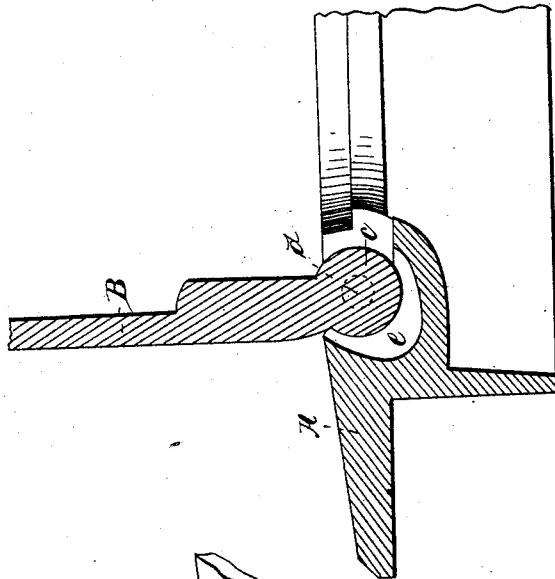
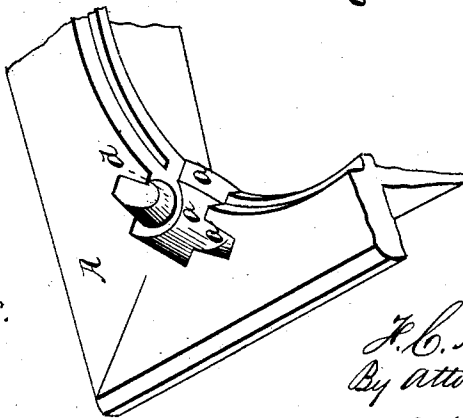


FIG 1.



Witnesses.

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UNITED STATES PATENT OFFICE.

F. C. ADAMS AND J. PECKOVER, OF CINCINNATI, OHIO.

HINGE.

Specification of Letters Patent No. 30,555, dated November 6, 1860.

To all whom it may concern:

Be it known that we, FEDERAL C. ADAMS and JOSEPH PECKOVER, of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in the Construction of Hinges; and we do hereby declare the following to be a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1, represents in perspective the two castings which form the hinge when united, but here represented as separated to better show their forms. Fig. 2, represents a section through the hinge when made.

Similar letters of reference where they occur in the separate figures denote like parts of the hinge, in both the drawings.

The hinge which we propose to make is more particularly applicable to the covers of street gas or water pipes or cocks, vault covers or man-holes, which are exposed to the weather and liable to become rusted, or forced open—though they may be economically applied to many other purposes. We are aware that hinges have been made of a male and female piece cast upon the two parts that are to be hinged together—but such hinged pieces are easily separated one from the other.

Our object is to make a hinge that will not easily admit of being separated while it affords great protection against corrosion by exposure to the weather. And our invention consists in casting a recess in one piece, and a projection upon the other piece—the recess being enough larger than the projection that is to lie and turn in it, that molten zinc or suitable metal may be poured into it, and surround the projection and closely and neatly fill up the depression as will be explained, but at the same time allow the projection to freely turn in the depression, but not to come out of it.

To enable others skilled in the art to make and use our invention, we will proceed to describe its application to water or gas-pipe,

or cock, covers, from which its general application may be fully understood.

A represents a portion of the stationary frame which is set over or around the well that incloses the street or pavement cocks—and B, represents a portion of the cover which fits into said frame to cover over the well. In the portion A, is cast a recess *a*, which is cut under considerably, and is much larger than the piece that is to enter it. On the cover B, there is a projection, composed substantially of a neck *b*, a hub or enlargement *c*—and two short journals *d, d*, all of which are cast with the piece or cover B. These several parts are much smaller than the parts of the recess *a* into which they are placed—so much so that there shall be no point of contact between them, but on the contrary considerable space between them. When the hinge is to be formed, the projection is covered over with soil or similar substance, such as is used for preventing one metal from adhering to another when one of them is in a molten state—it being simply washed over thinly. The cover may then be set in the recess prepared for it, its projections *b, c, d*, lying in said recess, but as before stated not touching. Molten zinc (*e*) (which we prefer) is then run into the recess until it is full, making a box or bearing of zinc in which the hub *c* and journals *d, d*, will freely turn and be supported, and the sides of the recess being cut or inclined under—the zinc wedges itself as well as the male part of the hinge to the case or frame; and the iron journals and hub resting upon, and being in contact with the zinc, will not corrode so readily, by the water that settles in their joints. There is no means of detaching the cover from the frame except by breaking one or both—as the hinge cannot be forced and hence these covers are not stolen or lost.

The hinge joint is very easily made very simple, and very efficient—and the journals becoming galvanized by the action of the zinc, will not rust away, as they would if in contact with iron. Other easily melted metal may be used instead of the zinc, or mixed

with it. We claim any soft or easily fused metal for filling the recess.

Having thus fully described how we make our hinge, and apply the same, what we claim therein as new, and desire to secure by Letters Patent is—

Forming a hinge by the combined use of the large cut-under recess on one part, and the projection *b*, *c*, *d* or its equivalent on

the other part, and the molten zinc, or other easily fused metal, run in between them—substantially as and for the purpose specified.

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Witnesses:

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