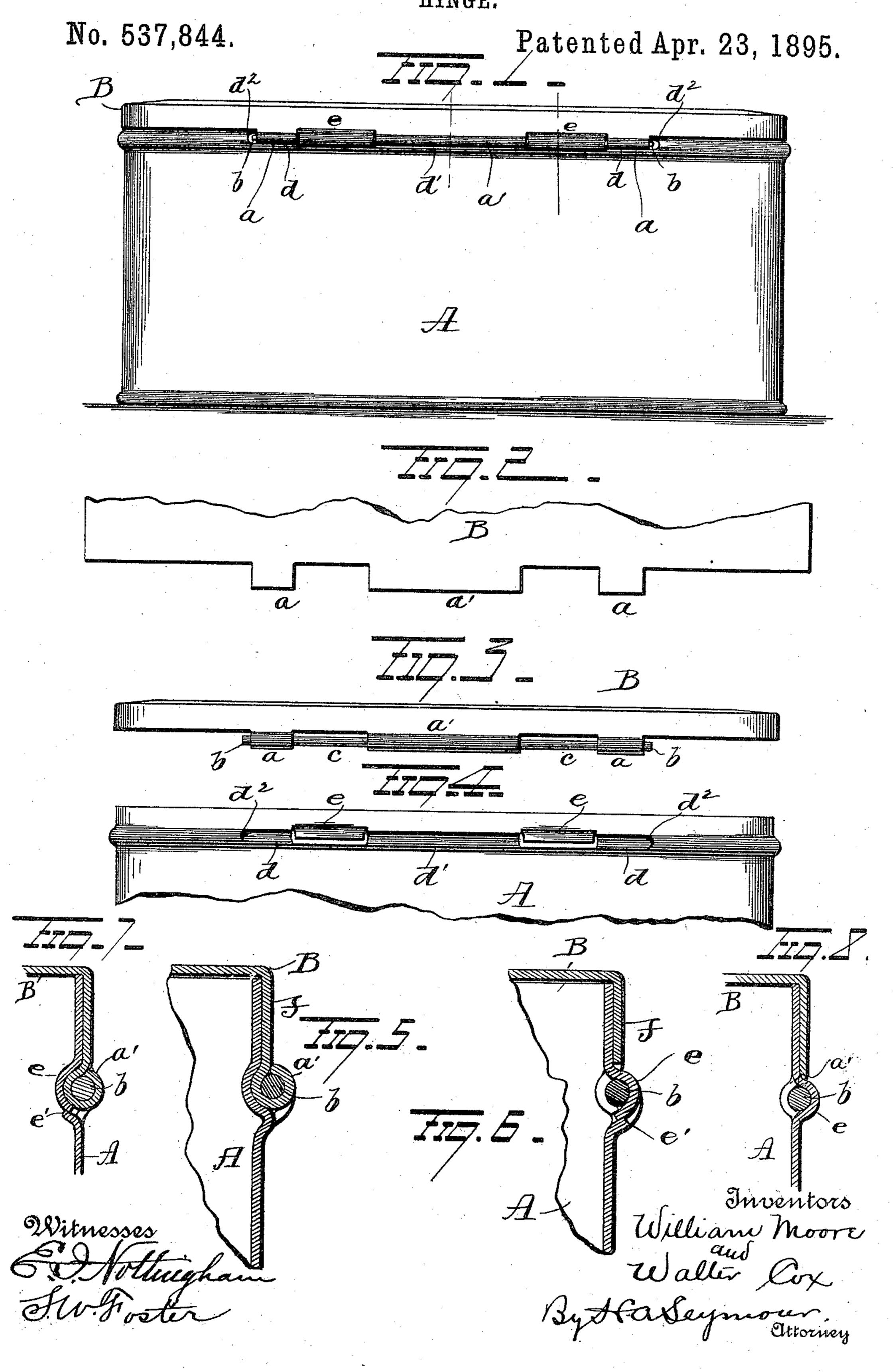
W. MOORE & W. COX. HINGE.



United States Patent Office.

WILLIAM MOORE AND WALTER COX, OF BALTIMORE; MARYLAND, ASSIGNORS TO H. F. MILLER & SON, OF SAME PLACE.

HINGE.

SPECIFICATION forming part of Letters Patent No. 537,844, dated April 23, 1895.

Application filed January 30, 1895. Serial No. 536,708. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM MOORE and WALTER COX, of Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Hinges; and we do here by declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to an improvement in hinges and more particularly to hinges for the lids or covers of sheet metal boxes,—the object of the invention being to construct the hinge in such manner that it can be cheaply produced and quickly and easily assembled.

A further object is to produce a hinge for the cover of a sheet metal box having the ears or leaves of the hinge made from and integral with the stock of which the box and cover are composed.

A further object is to so construct a hinge for a sheet metal box cover that the hinge pin shall be effectually prevented from accidental escapement.

A further object is to produce a hinge for a sheet metal box which shall be simple in construction and effectual, in all respects, in the performance of its functions.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as hereinafter set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view of a box having our improved hinge applied thereto. Fig. 2 is a view of the blank for the cover of the box having a portion of our hinge thereon. Fig. 3 is a view showing the portion of the hinge made on the box cover. Fig. 4 is a view showing the part of the hinge on the side of the box ready to receive the part of the hinge on the cover. Figs. 5 and 6 are sectional views through the hinge at different points. Figs. 7 and 8 are views of modifications.

A represents the body of a sheet metal box and B the cover therefor. The blank for the cover is made on one edge with a series of, preferably three, ears a, a, a, the central ear a 50 being preferably longer than the end ears a, a.

A wire or rod b which constitutes the hinge pin, is laid on the ears a, a, a' and the latter are then bent up and around said rod or wire as shown in Fig. 3, the imtermediate portions c, c of the rod or wire being thus left exposed. 55 The side of the box A to which the cover is to be attached, is made with a series of grooves or recesses d, d, d', the outer end of each groove or recess d forming a shoulder d^2 to prevent the escape of the rod or hinge-pin b 60 as more fully explained farther on. The grooves or recesses d, d' are made near the upper edge of the side of the box, and between said grooves or recesses, the metal is cut to produce ears e, e, which are first bent outwardly 65 as shown in Fig. 4. The cover B will now be placed in position, the ears e being made to engage or hook over the exposed portions c, c of the rod or hinge pin and the latter being made to enter the grooves or recesses d, d', in 70 which endwise movement of said rod or pin will be prevented by the above-mentioned shoulders d^2 . The ears e, e will now be bent down over the rod or pin b and the free edge of each ear e will be made to enter between 75 the edge e' of the slot or opening formed by the cutting out of said ears, and the rod or pin b. The hinge is now complete and the cover attached to the box in an effectual manner. When the lid or cover is opened to its full ex- 80 tent, the depending flange f of said cover will press against the ears e, e, and tends to insure their retention in proper position.

The parts of our hinge being closely associated, unduly large openings between the 85 box and cover will not be produced when the latter is opened or raised, and thus leakage of the contents of the box through the hinge connections will be avoided.

Instead of bending the ears a, a, a', up- 90 wardly and outwardly on the rod or hinge pin b so that their free edges will terminate on the outside of the box in the completed device, said ears may be bent on the rod or hinge pin in the opposite direction and made to terminate inside the box.

Instead of making the grooves or recesses d, d, d' in the outside of the box and bending the ears e, e, outwardly over the pin b, said grooves or recesses may be made in the inner 100

face of one side of the box and the ears e, e, bent inwardly and over the rod b, as shown

in Fig. 7.

The ears e, e may be formed by pressing them from the metal of the side of the box without first cutting them and afterward bending them over the pivot pin b, both edges of said ears e, e, thus being integral with the box, as shown in Fig. 8.

o Our improvements are very simple in construction, easily and quickly manufactured and are effectual, in all respects, in the per-

formance of their functions.

Having fully described our invention, what we claim as new, and desire to secure by Let-

ters Patent, is—

1. The combination with a sheet metal box living a groove formed therein a short distance from its upper edge, the ends of this groove constituting shoulders, a hinge pin adapted to lie in this groove and ears cut from the box between which and the groove the

hinge pin is held, of a cover having a flange at the edge which overlaps the edge of the box above the groove, integral ears at the extreme 25 lower edge of this flange adapted to receive the hinge pin, substantially as set forth.

2. The combination with a sheet metal box and its cover, of ears projecting from the cover, a rod or hinge pin connected to said 30 ears, ears projecting from the box and adapted to alternate with the ears on the cover and receive the intermediate portions of the rod or hinge pin, the free edges of the ears on the box being made to enter the slots made by 35 said ears, substantially as set forth.

In testimony whereof we have signed this specification in the presence of two subscrib-

ing witnesses.

WILLIAM MOORE. WALTER COX.

Witnesses:

ALAN R. FERGUSSON, A. J. SCOPINICH.