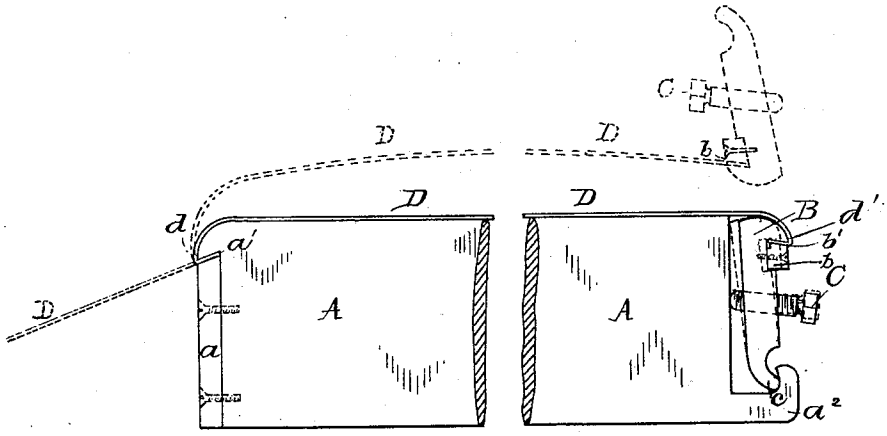
(No Model.)

A. H. CRUSE.

DEVICE FOR APPLYING ZINC OR OTHER THIN SHEETS TO BED PLATES.

No. 457,305. Patented Aug. 4, 1891.



WITNESSES: Frank Thompson, L. Pritchett

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UNITED STATES PATENT OFFICE.

AMANDUS H. CRUSE, OF BROOKLYN, ASSIGNOR, BY MESNE ASSIGNMENTS, TO JULIUS BIEN AND WILLIAM FRANKLIN, OF NEW YORK, N. Y.

DEVICE FOR APPLYING ZINC OR OTHER THIN SHEETS TO BED-PLATES.

SPECIFICATION forming part of Letters Patent No. 457,305, dated August 4, 1891.

Application filed December 31, 1888. Serial No. 295,090. (No model.)

To all whom it may concern:

Be it known that I, AMANDUS H. CRUSE, a subject of the Emperor of Germany, but having declared my intention of becoming a citizen of the United States, a resident of Brooklyn, county of Kings, and State of New York, certify that I have invented certain new and useful Improvements in Applying Zinc or other Thin Sheets to Solid Bed-Plates, of which the following is a specification.

My invention relates to facing or applying to solid bed-plates—as of iron, wood, or any other suitable material—thin sheets or veneers of zinc, brass, celluloid, or other substances adapted primarily for use on lithographic, printing, or embossing presses, and secondarily for other purposes where sheets of zinc or other thin material may be used on or in connection with solid beds, and has for its object the provision of a device cheap in manufacture, simple in construction, and efficient in practical use.

To attain the above results my invention consists in the construction and arrangement of parts hereinafter fully set forth.

The accompanying drawing represents an end or side view of a bed-plate, showing a zinc or other thin sheet secured thereover by my improved means.

Similar letters wherever they occur indicate corresponding parts.

Referring again to the drawing, A represents a cast-iron bed-plate. To one edge of the bed A is rigidly attached a plate *a*, ordinarily the length of the bed-plate, the upper edge of the same being beveled and forming in connection with the projecting top of the bed A, the under side of which inclines downward and outwardly, as shown in the figure, a hook-inclined slot a' of sufficient dimensions to admit the entrance of a sheet of zinc D and forming a catch or holding device, for the purpose hereinafter set forth. The plate B, ordinarily the same length of the bed A, is also provided with a strip *b*, beveled upon the upper side and forming in connection with the projecting lip of the plate B, the lower portion of which inclines downward and outwardly, a slot b' of similar character and dimensions as the slot a'. The plate B is also provided with one or more threaded perforations, through which passes a separating screw or screws C. The plate B has a hook or curved portion *c* on its lower edge, which engages a hook or upwardly-bent flange a^2, projecting from the lower edge of bed A, thus sustaining the plate B, as indicated in the drawing, and prevents the lower edge thereof moving outwardly when the screws C are operated to force the upper edge of the plate B, to which the edge of sheet D is attached outward or away from the bed. In other words, the lower edge of the plate is substantially hinged to the bed while its upper edge is free to swing.

The operation of parts is as follows: One end *d* of a sheet of zinc D of suitable size is first inserted into the slot a'. Then the zinc is bent around over the top face of the bed A, the edge *d* of the sheet becoming thereby caught and held in the catch or holding device formed on one edge of the bed A, and represented in this instance by the slot a'. The plate B is now applied to the opposite edge d' of the zinc sheet D, the said edge d' being inserted in the slot b', the position of the plate B, however, being now reversed, so that the slotted extremity of the same will be the lower one, and upon turning the plate B over, so that the thinner end *c* of the same will engage with the hooked-shape end a^2 of the bed A, the zinc sheet D will be found to lie snugly over the face of the bed A. Now, upon turning the screw or screws C the metal sheet D will be stretched straight, direct, and outward in a plane parallel to the face of the bed-plate in a uniform manner without injury, thereby fastening the same tightly and rigidly to the bed A. The plate B thus receives and holds the edge d' of the zinc D against the edge of the bed A, and also becomes interlocked with the same. The slots a' and b' being formed in a similar manner, I sometimes, as a matter of convenience and to facilitate the operation, bend both the edges *d* and d' of the zinc D before I apply the plate B thereto. The sheet D may thus be applied to the bed A and plate B and removed at will, either similar opposite bent edge *d* or d' of the sheet D being engaged at pleasure with the slot *a* of the bed A and the other with the slot b' of the plate B.

In the drawing the several operations before the final one are represented in dotted lines.

It will be observed that in using or operating, bending, or otherwise, these sheets of zinc or other material, the same are not injured, weakened, kinked, bent, or hurt in any manner, and the same can be applied to, removed from, and again replaced on the bed at will, and, also, that no machine is required to bend curves, edges, or otherwise form these sheets to fit on beds, the appliances belonging to and which form a part of said beds making the necessary bends when applied without further operation, change, or labor.

As it is evident that many slight changes in the construction and relative arrangement of parts might be resorted to without departing from the spirit and scope of my invention, I would have it understood that I do not restrict myself to the particular construction and relative arrangement of parts shown and described, but that I reserve the right to make such changes.

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

1. The combination of the bed and the covering-sheet therefor attached at one edge to one edge of the bed and lying over the face thereof with the plate lying beside the other edge of the bed and having its lower edge loosely confined to the bed and provided with screws, by which its upper edge can be forced outward away from the bed, the other edge of the sheet being attached to the upper edge of the plate, as and for the purpose specified.

2. The combination of the bed having hook or flange a^2 at one edge and the plate B resting upon said hook a^2 and engaging the same by its lower edge, and the screws C playing through threaded openings in said plate and impinging against the edge of the bed, with the covering-sheet secured by one edge to the top of plate B and by its opposite edge to the edge of the bed opposite said plate, all substantially as set forth.

3. The combination, with the bed A, provided with the slot a' and hook a^2, and the plate B, provided with a slot b', thin end c, adapted to engage with hook a^2, and screws C, of the sheet D, provided with bent edges d and d', substantially as and for the purpose described.

AMANDUS H. CRUSE.

Witnesses:
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