(No Model.)

J. H. CROCKER.

CORNICE BRAKE.

No. 504,710. Patented Sept. 12, 1893.

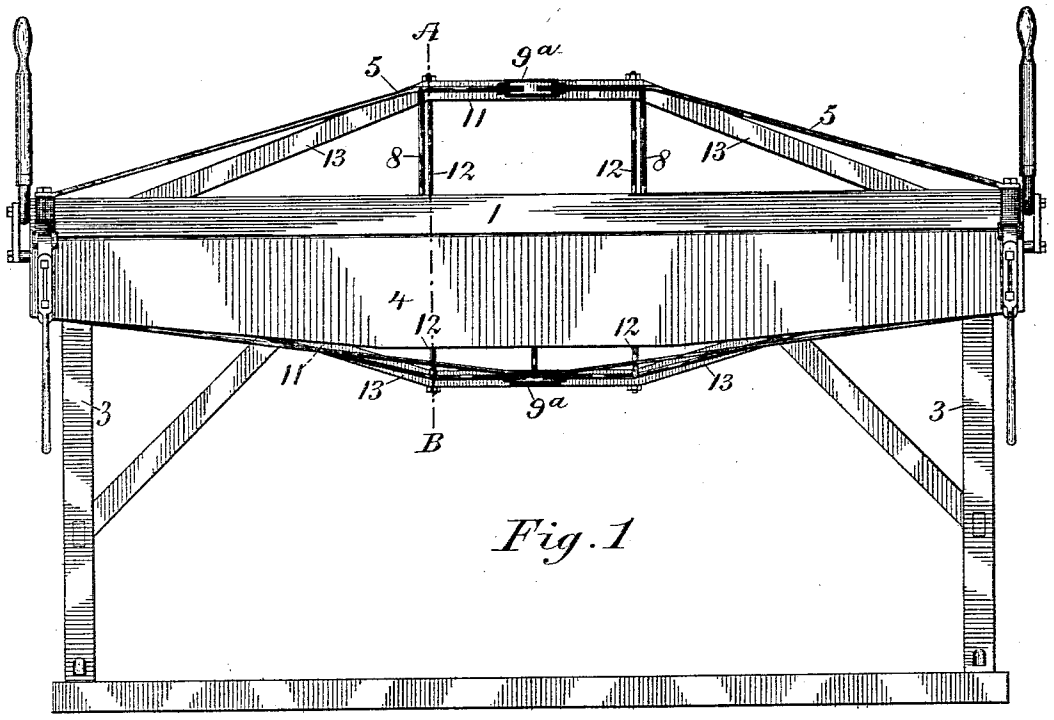

Fig. 1

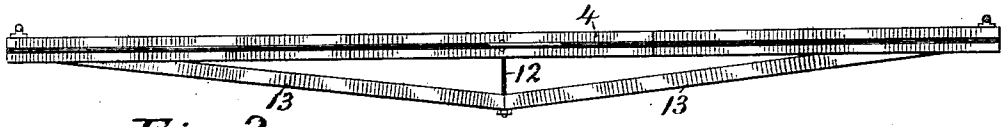

Fig. 2

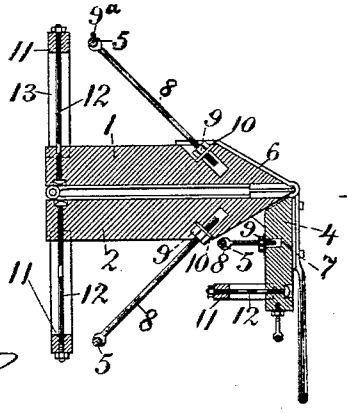

Fig. 3

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UNITED STATES PATENT OFFICE.

JOHN H. CROCKER, OF SHELBURNE, CANADA.

CORNICE-BRAKE.

SPECIFICATION forming part of Letters Patent No. 504,710, dated September 12, 1893.

Application filed November 7, 1892. Serial No. 451,136. (No model.)

To all whom it may concern:

Be it known that I, JOHN HOOPER CROCKER, of the village of Shelburne, in the county of Dufferin, Province of Ontario, Canada, have invented certain new and useful Improvements in Sheet-Metal-Bending Machines, commonly known to the trade as Cornice-Brakes, of which the following is a specification.

My invention relates to certain improvements in the trussing of the leaves between which the metallic sheets or plates are secured in bending, folding and all operations performed on such machines.

In machines used for this purpose, there has heretofore existed an undesirable amount of yield at the centers of the leaves which was the result of torsion or twist of said leaves and evidence of a lack of rigidity to fully and thoroughly perform the uniform bending or folding of the heavier sheets of metal, from end to end, or side to side, existed.

By my improved construction I attain the requisite rigidity, and by reference to the accompanying drawings I will hereinafter described my invention.

In the drawings similar numbers of reference refer to similar parts throughout.

Figure 1, represents a front elevation of a machine according to my invention. Fig. 2, represents an edge view of the folding leaf or apron, and Fig. 3, represents a cross-section on the line A—B of Fig. 1.

My improved cornice brake resembles other machines heretofore for the same purpose, in the particulars of having an upper leaf, 1, hinged to and supported by the lower leaf, 2, which is supported by the usual legs, 3. The folding leaf, 4, hinged to the lower leaf, 2, is also similar to others in use, but in the particular trussing of the said upper and lower leaves, 1, and 2, respectively, and the apron or folding leaf, 4, is where my invention is confined.

In other machines heretofore constructed of wood, or metal, a single truss was employed and was located about the center of the leaves which did not support the leaves from torsion or twist, which acted to raise one edge of the leaf at center and lower the opposite edge correspondingly without causing any deflection of the entire leaf at center. I overcome this defect by the use of preferably a metallic truss rod, 5, secured at each end in each of the leaves, 1, 2, and 4. In the upper and lower leaves 1, and 2, respectively, they are inclined backward about parallel with the inclination of the beveled faces, 6, and 7, of said leaves.

At equal distances on each side of the centers of said truss rods, 5, I provide posts or struts, 8, adapted to support the rod, 5, at their upper ends and at their opposite ends they are threaded and are provided with a nut, 9, on each strut, 8.

Beneath the nuts, 9, and resting on the leaves, 1, 2, and 3, I employ metal washers or plates, 10, to support the nuts, 9, from crushing the wood, when constructed of wood. By turning the nuts, 9, to elevate the struts, 8, or the turn buckles 9^a, tension on the truss-rods, 5, is obtained. At the rear edge of the leaves 1, and 2, and the lower edge of the apron, 4, I employ a perpendicular truss, 11, of the king-post variety having a perpendicular tie-rod, 12, holding the centers of the truss and the leaf from separating farther apart. The braces, 13, of the truss, 11, are struts instead of tension rods, and being on the same side of the said leaves as the tension truss, 5, has the same effect as that of a tension rod on opposite side, or of a block placed between the leaves, 1, and 2, at their rear edges, that is, the leaves are prevented from twist and their rear edges are rigidly held apart.

In machines constructed of metal instead of wood the same construction applies equally to strengthen the leaves and apron or folding leaf. I may also use any number of posts required by the length of the leaves.

Having now described my improved construction and invention in cornice-brakes, what I claim, and desire to secure by Letters Patent, is—

In a cornice brake, the combination on the same side of the leaves, of the tension truss inclined as specified, and the king-post truss secured to stand vertically at the rear edge of said leaves, substantially as shown and set forth.

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Witnesses:
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