

(No Model.)

J. DUNN.

MACHINE FOR FORMING METALLIC EAVES TROUGHS.

No. 246,736.

Patented Sept. 6, 1881.

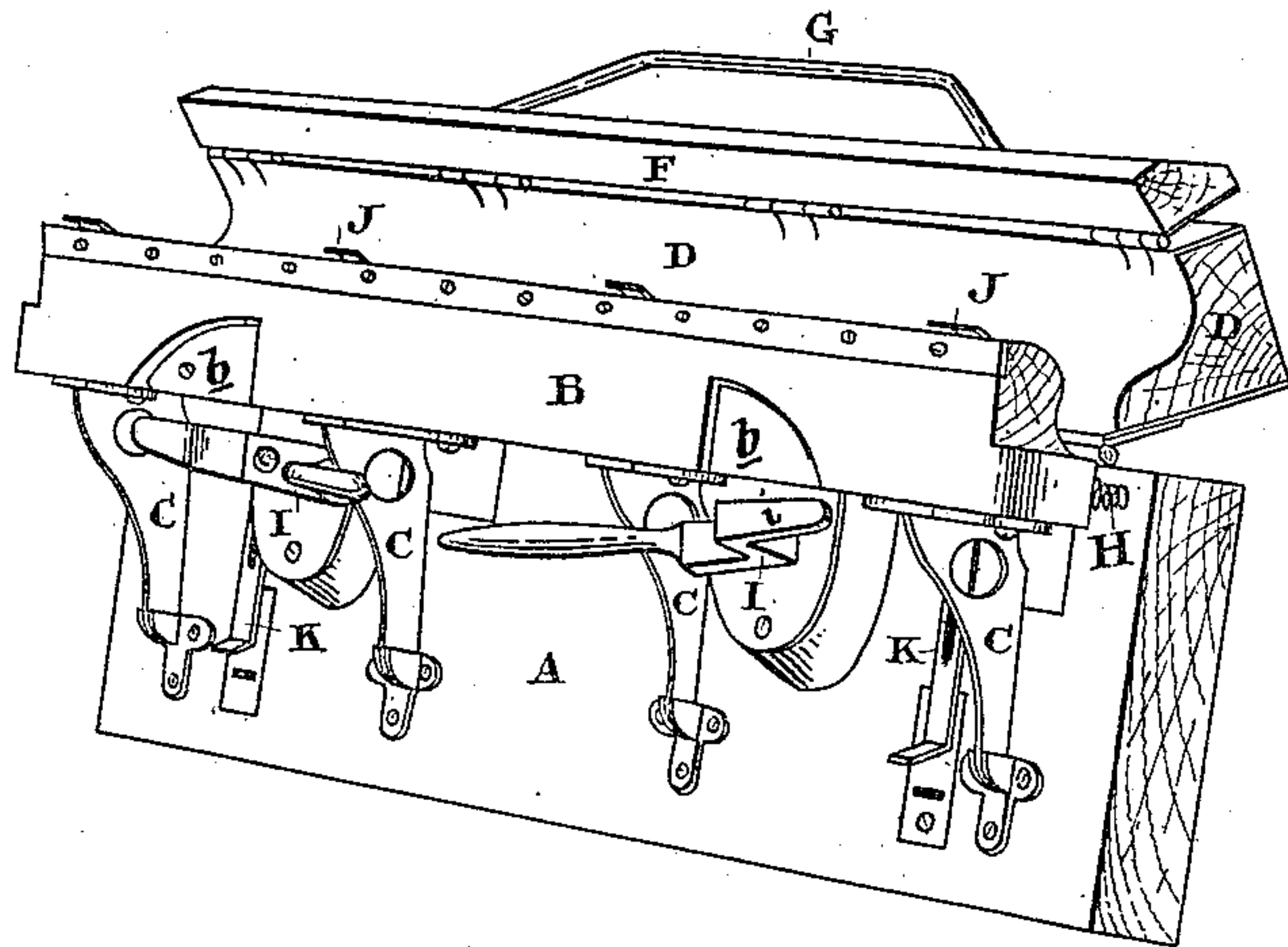


Fig. 1.

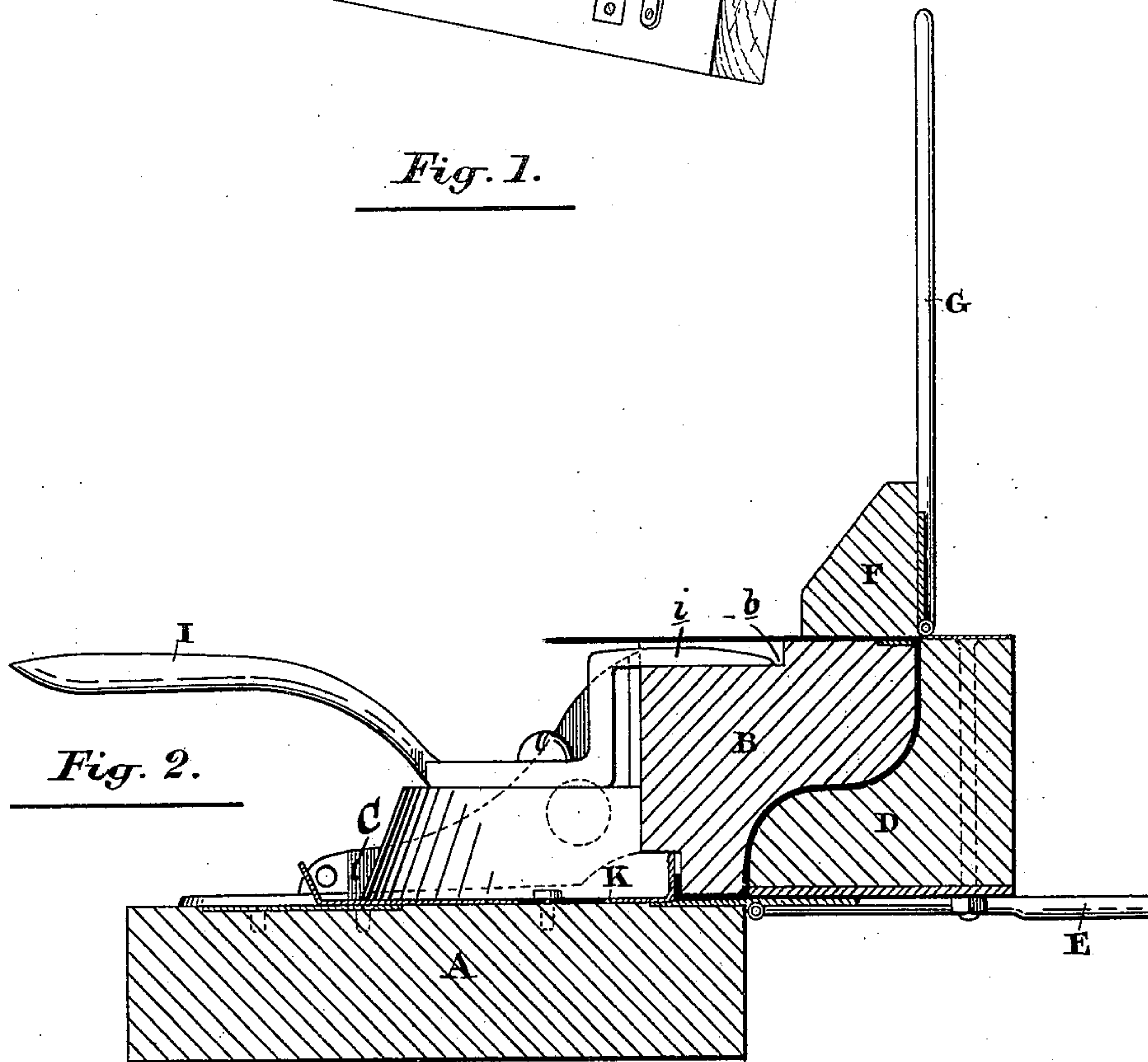


Fig. 2.

Witnesses.

Lewis Tomlinson

A. H. Warren

Inventor.

J. Dunn
by Richard Bird & Co.
Attys.

UNITED STATES PATENT OFFICE.

JAMES DUNN, OF PORT HOPE, ONTARIO, CANADA.

MACHINE FOR FORMING METALLIC EAVES-TROUGHS.

SPECIFICATION forming part of Letters Patent No. 246,736, dated September 6, 1881.

Application filed May 20, 1881. (No model.) Patented in Canada April 13, 1881.

To all whom it may concern :

Be it known that I, JAMES DUNN, of the town of Port Hope, in the county of Durham, in the Province of Ontario, Canada, have invented a new and useful Machine for Forming Metallic Eaves-Troughs, of which the following is a specification.

The object of the invention is to produce a machine which will enable one man to form eaves-troughing in six-foot lengths; and it consists in a suitably-formed block hinged to a bed-plate, and provided with springs and adjusting-levers, as hereinafter explained, and operated in combination with a double hinged former provided with suitable handles, and so arranged, in connection with the horizontal block, that metallic eaves-troughs can be formed readily by it, as hereinafter explained.

Figure 1 is a perspective view, and Fig. 2 is a sectional end elevation, of my eaves-trough former.

In the drawings, A is a bed-plate; B, the forming-block, which is hinged, as shown, to the bed-plate A by the arms C.

D is a forming-block, hinged to the bed-plate A and provided with a handle, E. F is also a forming-block, hinged to the block D and provided with a similar handle, G.

H are spiral springs, set between the bed-plate A and block B, for supporting the latter.

I are clamping-levers for forcing the block B against its bed-plate A when the metallic plate is set in position for forming the eaves-trough.

The parts herein described may be made of wood or other suitable material, and are connected together, substantially as represented, in a strong manner, so as to be able to resist the strain caused by the forming of the trough.

In order to form the trough the plate is first placed in the receivers J, situated along the face of the block B, as represented. These receivers support the plate, so that when the blocks D and F are brought up against it the outside edge of the eaves-trough is first formed, the blocks D and F are then allowed to fall back, and the edge of the plate thus turned up is slipped in below the block B, butting against the adjusting-plates K, situated on the bed-plate A, as represented, the levers I being removed from the block B, so as to permit

it to be forced away from the bed-plate A by the action of the spiral springs H. When in this position the metal plate can be slipped in below the block B, its bent edge, as I have before said, butting against the adjusting-plates K, which are slotted and provided with clamping-screws. When the metallic plate is thus situated the levers I are turned on their pivots, so that their upper ends, *i i*, acting on the inclined surfaces, *a a*, of the block B, will force said block down upon the bed-plate, so as to gripe the metal plate between it and the bed-plate. The forming-block D is then drawn up, forcing the plate against the block B, the faces of the two blocks being shaped to the desired form of the eaves-trough, and this movement forces the projecting spring-receivers J into recesses made to receive them in the block B. In this way the body of the eaves-trough is formed, when, by pushing over the forming-block F, the shape of the eaves-trough is completed. The forming-blocks D and F may then be allowed to fall back and the levers I removed from the block B, which will then spring open and permit the withdrawal of the plate beneath it, which is by that time formed into the shape of the eaves-trough.

It will be seen that in a machine constructed as shown and described the formation of the metal plate will be both rapidly and easily effected, requiring only the service of one man, and as the plate is formed into shape by the same formers at each operation the different lengths of the eaves-troughs thus made can be depended upon to be the same shape, and will, therefore, be rapidly put together.

I may mention that the forming-blocks can be changed and smaller or larger ones substituted, permitting the formation of different sizes of eaves-troughing.

What I claim as my invention is—

1. A bed-plate, A, provided with adjustable gages, and having hinged to it a forming-block, B, provided with suitable clamping devices, and a forming-block, D, furnished with a handle, E, in combination with a forming-block, F, hinged to the block D and having a handle, G, the said parts being arranged to operate as described, for the purpose of making metallic eaves-troughing, as specified.

2. In a machine for making metallic eaves-

troughing, a forming-block, B, provided with receivers J, in combination with the hinged blocks D and F and bed-plate A, for the purpose of forming the edge of the eaves-trough,
5 as specified.

3. In a machine for making metallic eaves-troughing, a block, B, having an ogee face, and hinged to the bed-plate A by the arms C, the

spiral springs H, and clamping-levers I, arranged and operating in combination with the 10 forming-blocks D and F, substantially as and for the purpose specified.

JAMES DUNN.

Witnesses:

RICHARD DUNN,
JAS. ARCHER.