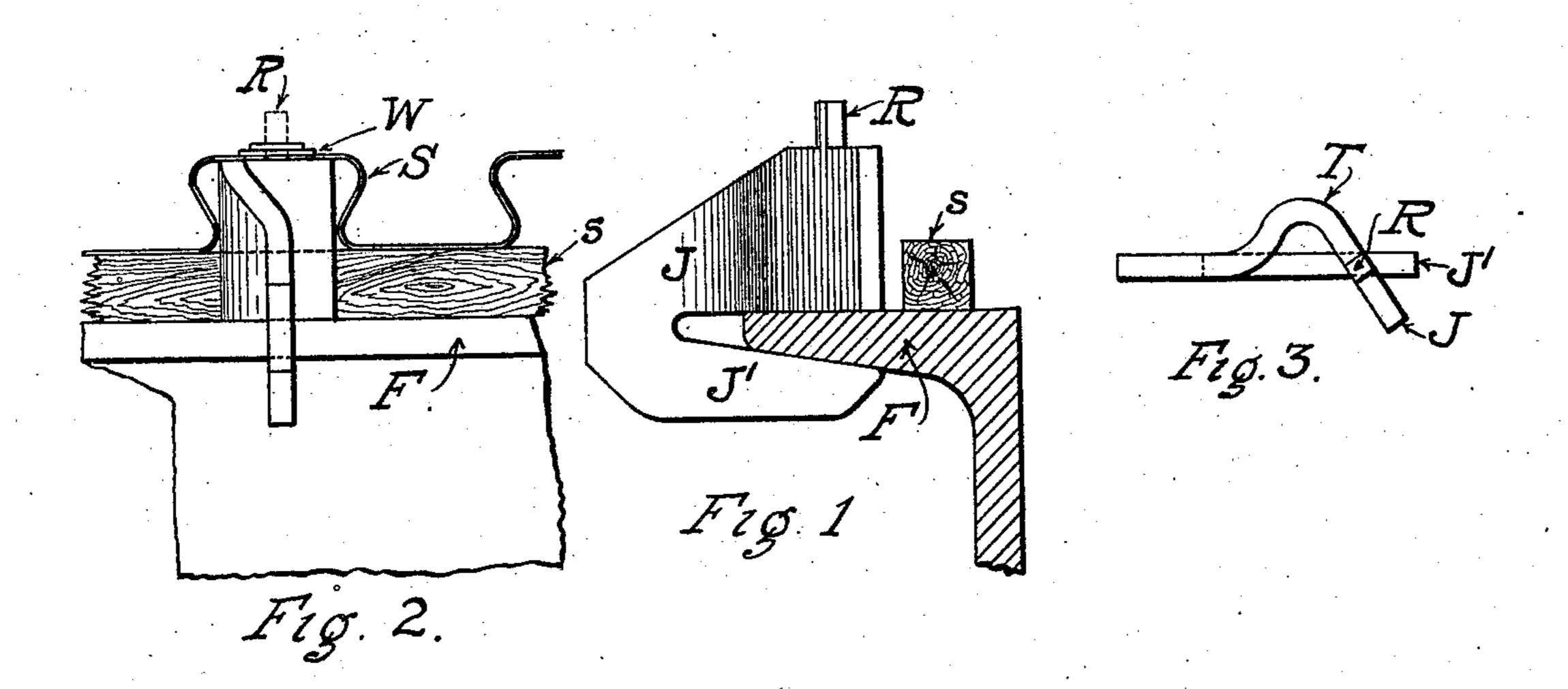
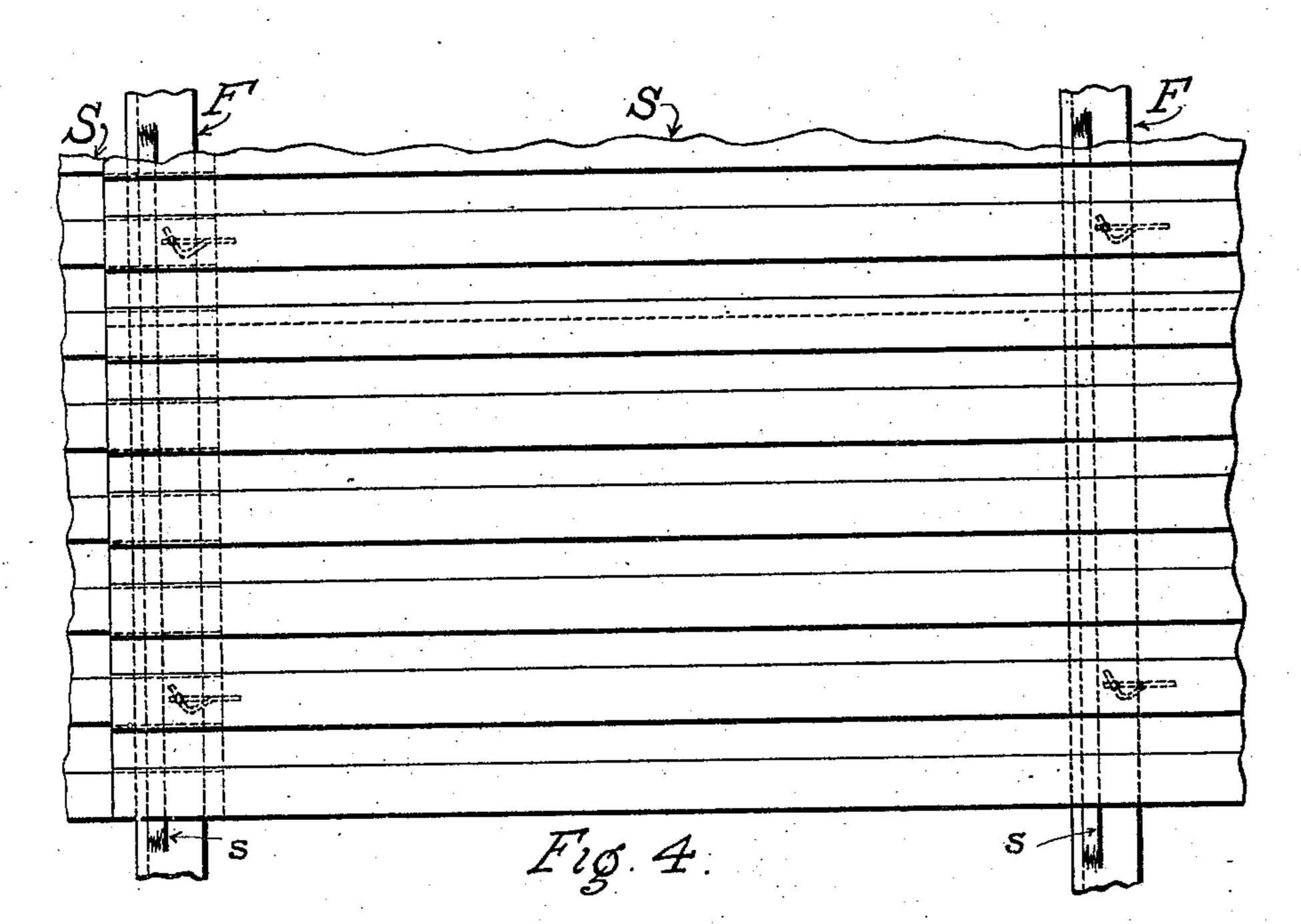
H. F. COBB.

CLIP RIVET.

APPLICATION FILED JAN. 24, 1907.





WITNESSES: Shipps. Herbert F. Golf
BY George Coning
his ATTORNEY

## UNITED STATES PATENT OFFICE.

HERBERT F. COBB, OF CLEVELAND, OHIO, ASSIGNOR TO THE BROWN HOISTING MACHINERY COMPANY, OF CLEVELAND, OHIO.

## CLIP-RIVET.

No. 849,770.

Specification of Letters Patent.

Patented April 9, 1907.

Application filed January 24, 1907. Serial No. 353,881.

To all whom it may concern:

Be it known that I, Herbert F. Cobb, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and useful Clip-Rivet for Fastening Sheet Metal and Similar Material to Buildings or other Structures, of which I hereby declare the following to be a full, clear, and exact description, due reference being had and intended to the drawings accompanying and made a part of this specification.

My invention relates and belongs to the class of articles or contrivances that are used in and as a part of the construction of roofs, walls, floors, &c., and more particularly when such constructions are to have sheet metal in one or more of its various forms applied to the flanges of I-beams, channels, angles, and like structural material as the supporting

medium for said metal.

Heretofore, so far as I am aware, in order to secure the sheets in place—on roofs, for instance—it has been the necessary practice to 25 rivet them to a clip in the form of an elongated piece or part of a suitable contour to extend downwardly and beneath the flange. This operation requires the services of two men, one above the plates or sheets to drive 30 the latter down over the rivet and thereafter flatten the same and the other, usually known as the "bucker-up," beneath the plate to hold a dolly-bar under the rivet during the process. Besides the undesirable cost thus 35 involved there are other incidents characterizing the operation that work to the same end, all of which it is the object of my present invention to overcome or reduce in a marked degree. To accomplish this, I pro-40 vide a form of clip with an adhering rivet so constituted and related that it may be made to clutch the flange of the part to which the sheet is to be applied and in such position to present the rivet for the downward blow and 45 in this manner enable the "bucking-up" to be done by the flange rather than by a man.

In the drawings, Figure 1 is a side view in elevation of the clip when in engagement with a flange. (Shown in section.) Fig. 2 is a front elevation of Fig. 1, but with the rivet driven home through the sheet metal, as indicated. Dotted lines indicate the rivet before the operation. Fig. 3 is a plan view of Fig. 1 with the flange omitted; and Fig. 4 is

a plan view of several sheets joined to the 55 frame of a structure by means of said clip, which latter is shown in dotted lines beneath. The sheets are represented as overlapping each other at the left of the drawing.

The clip proper is an irregular-shaped 60 piece of any malleable material, composed of upper and lower jaws J and J', respectively, suitably separated one from the other to receive between the same and fit onto the particular flanges in each case in connection 65 with which the clip is to be used.

In the drawings, F represents the flange. A rivet or rivet-stock R projects upwardly from and integrally with the upper jaw J, which jaw is given such vertical dimension 70 that when the clip is seated on the flange the point of the stock R will be in immediate proximity to the place where it is to enter the sheet or plate. S represents such sheet or plate, and s supporting-strips for the same, 75 that are sometimes used.

W is a washer that may be usefully placed on the rivet R before it is driven down. In order to provide a sufficient bearing for the clip to insure its upright position when in 80 place on the flange, the upper jaw J is given a crimp or turn from or across the vertical plane of the lower jaw J, as shown by T in Fig. 3.

Having thus described said invention, the 85 manner of using the same requires little explanation. The clip is simply hooked onto the flange as the workman proceeds, his one hand doing this as the other draws over and steadies the sheet upon the projecting rivet 90 R. In this relation the sheet and rivet are given a downward blow through an interposed block, as usual. The rivet will of course perforate the sheet and appear on the upper surface of the same, when it may be 95 flattened down in the customary manner.

Although as a concrete embodiment of my conception I have shown and described a clip where the edges of the metal are the contacting surfaces for the jaws, the bearing or 100 crimp T is a simple inturn across their planes, and the rivet R is integral, I do not intend to limit the same to a clip of precisely these characteristics. It is conceivable that a clip could be made, for instance, where the jaws 105 engage the flange upon the flat surface of the metal rather than the edge, the inturn be varied, or the rivet be distinct from rather than

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integral with the clip proper without a departure from the invention when broadly considered. Any form that engages the flange between jaws or like members for the purpose and in such position presents the rivet at its top in such relation to the upper of said members that the latter will serve as the anvil or bucker-up for the riveting blow must fall within the scope of the invention.

Having described said invention, what I wish to secure by Letters Patent is—

1. A clip-rivet made up of an upper and lower jaw, and a rivet surmounting the same substantially as shown and described.

other material, to flanges and like parts, made up of an upper and lower jaw, the upper jaw carrying an upright rivet, and being raised to a suitable height to bring the point

of said rivet in near proximity to the level at 20 which it is to penetrate said material, when said clip-rivet is in engagement with a flange, substantially as shown and described.

3. A clip-rivet for fastening sheet metal, or other material to flanges and like parts, made 25 up of an upper and lower jaw, the upper jaw carrying an upright rivet and being raised to a suitable height to bring the point of said rivet in near proximity to the level at which it is to penetrate said material when said 30 clip-rivet is in engagement with a flange, and being bent, or otherwise shaped, at an angle with the plane of the lower jaw, substantially as shown and described.

H. F. COBB.

In presence of—
Howard A. Couse,
George C. Wing.