No. 656,274.

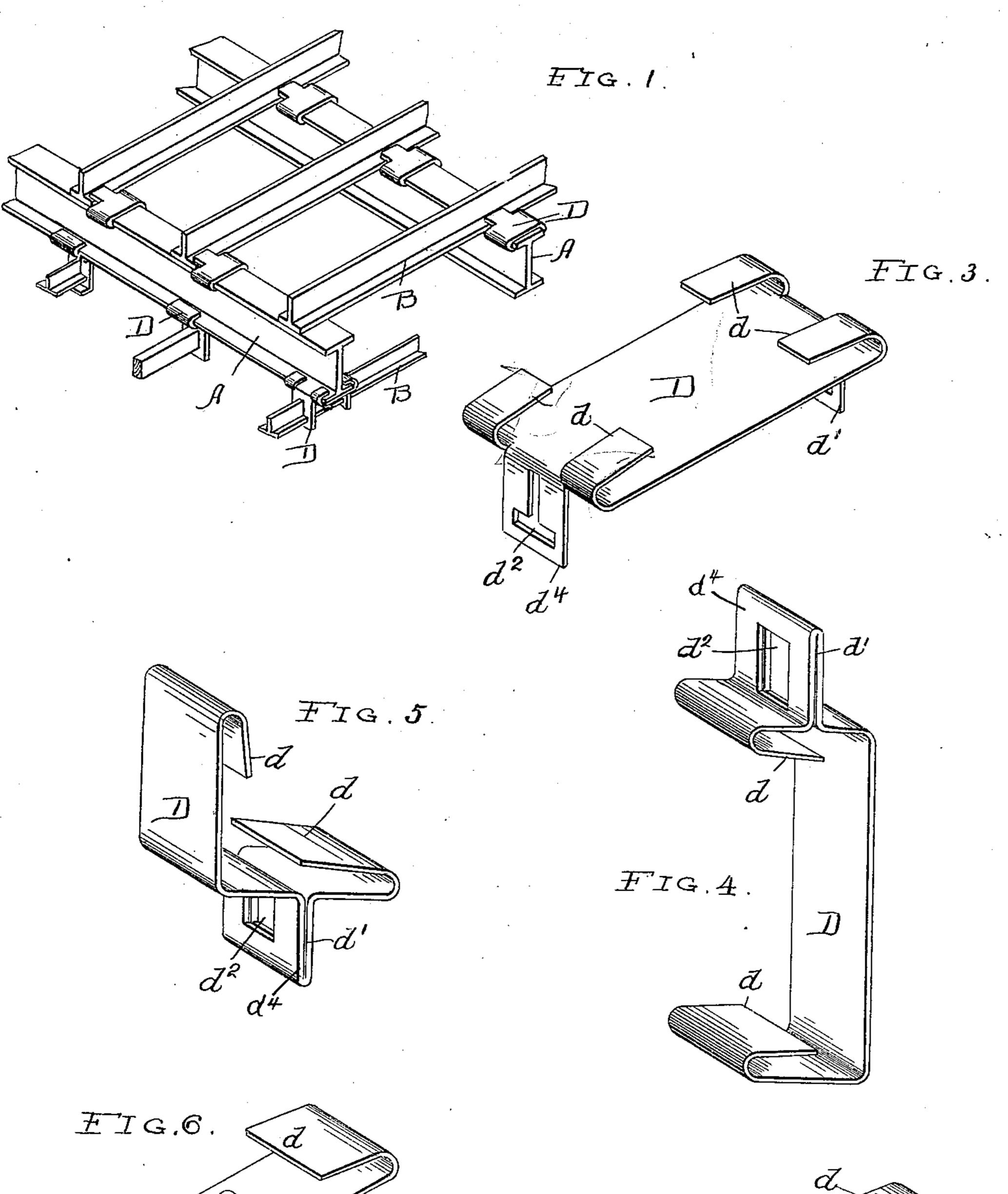
Patented Aug. 21, 1900.

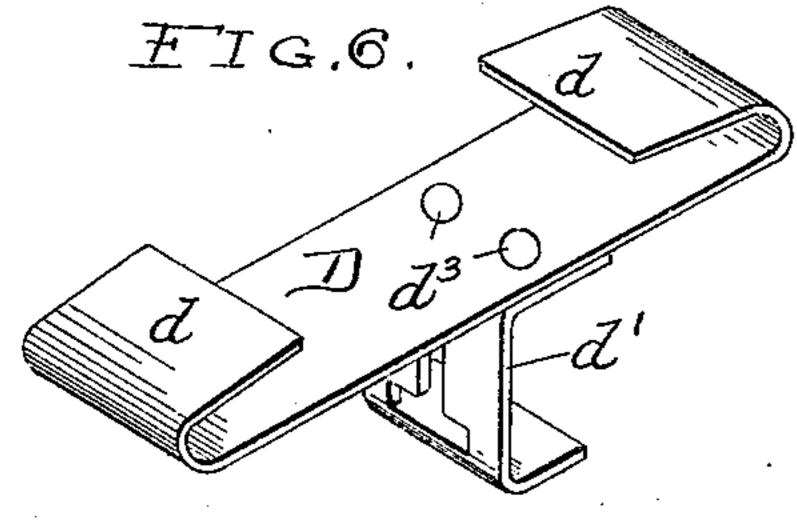
## H. A. STREETER.

## CLIP FOR STEEL BUILDING CONSTRUCTION, &c.

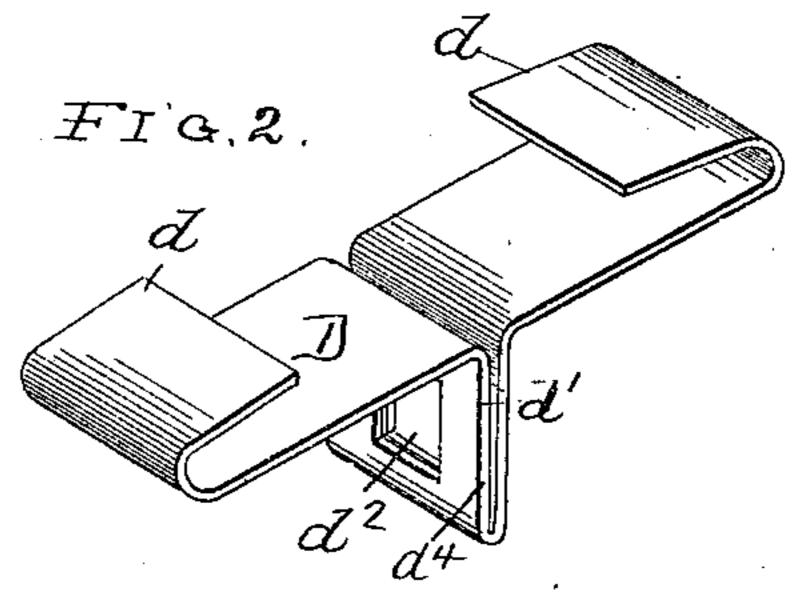
(Application filed Mar. 17, 1900.)

(No Model.)





WITNESSES. Sew C. Courtie



INVENTOR.

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HIS ATTORNEYS

## United States Patent Office.

HERBERT A. STREETER, OF CHICAGO, ILLINOIS.

## CLIP FOR STEEL BUILDING CONSTRUCTION, &c.

SPECIFICATION forming part of Letters Patent No. 656,274, dated August 21, 1900.

Application filed March 17, 1900. Serial No. 9,021. (No model.)

To all whom it may concern:

Be it known that I, HERBERT A. STREETER, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illi-5 nois, have invented a new and useful Improvement in Clips for Steel Building Construction and other Steel Framework, of which the following is a specification.

My invention relates to improvements in 10 construction of iron or steel buildings or structures wherein the roofs, floors, or ceilings are formed of or supported by iron or steel beams or bars crossing each other, and more particularly to improvements in the 15 metal clips heretofore patented to me in Letters Patent of the United States No. 459,051, of September 8, 1891, and No. 555,981, of March 10, 1896, by which the crossing beams or bars are firmly spaced and secured together and 20 supported or suspended one from another.

The object of my present invention is to simplify and improve the construction of said clips and increase their efficiency and strength, and at the same time enable them

25 to be made without waste of metal.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of a device embodying my invention. Fig. 2 is a detail view of the clips. 30 Fig. 3 is a detail view of the double-eye clip employed where the ends of two bars meet, and Figs. 4, 5, and 6 illustrate the application of the invention to different shapes of beams.

In the drawings, A and B represent two 35 iron or steel beams of a building or other structure crossing each other, the same being of any suitable or customary form—as, for example, I-beams, T-beams, angle-beams, channel-beams, or other desired shape in 40 cross-section and one supported on or suspended from the other. As illustrated in the drawings, some of the beams or bars are represented as being suspended from the beam A.

D is a metal strap-clip made of strap or 45 band metal—that is to say, iron or steel rolled into narrow strips. The clip D has a fold or folds d d at each end, embracing the edges or flanges of one of the two beams—for example, the beam A. The clip D is further provided 50 with flanges d'  $d^4$ , through which an eye or

and support the crossing beam or bar B and through which said beam or bar may be slipped. As shown in Figs. 2, 4, and 5, the two flanges d' and  $d^4$  are closely adjacent to 55

each other and folded flat together.

At points where the ends of two beams or bars BB meet I prefer to slit the ends of the strap-clip D and form the flanges d' d4 at a distance apart, so that the meeting end of one 60 bar B may rest in the eye  $d^2$  of one flange d', while the end of the other beam may rest in the eye  $d^2$  of the other flange  $d^4$ . In this construction the folds dd, which are folded about and embrace the beam A, are not the full 65

width of the steel strap-clip.

As my improved clip is formed of comparatively narrow strips of rolled steel and the bends or folds therein are all formed across the length of the strip—that is to say, across 70 the fiber of the metal—it possesses great strength for the weight of metal employed therein, and this construction overcomes the weaknesses or imperfections in steel clips resulting from bending lips or folds thereon in 75 the direction of the fiber of metal.

My invention may be applied to and used in connection with beams or bars of any suitable or desired shape in cross-section, as will be readily understood from the drawings, in 80 which I have illustrated it as applied to beams or bars of a few different shapes.

In Fig. 6 the flange d' is shown as being made in a separate piece. In this construction it is secured to the clip by any suitable 85 means—for example, by rivets  $d^3$ .

I claim-

1. In a steel building or other structure, the combination with the crossing beams or bars A, B, of a metal strap-clip for securing 90 said beams or bars together, having folds at its ends embracing one of said beams or bars, and provided with flanges having eyes formed or punched through the same at right angles to their plane to receive the other beam or 95 bar, substantially as specified.

2. A metal strap-clip having folds dd at its ends to embrace one beam or bar, and flanges  $d' d^4$  furnished with eyes  $d^2 d^2$ , substantially as specified.

3. A metal strap-clip having folds dd at its opening  $d^2$  is punched or formed to receive | ends to embrace one beam or bar, and flanges

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d'  $d^4$  furnished with eyes  $d^2$   $d^2$ , said flanges  $d' d^4$  being folded flat together or doubled,

substantially as specified.

4. A metal strap-clip D slit at its ends and 5 having a portion of its slit ends formed into folds d d to embrace one beam, and other portions of its slit ends formed into flanges d'  $d^4$ extending at right angles and provided each with an eye  $d^2$  to receive a crossing-beam, subro stantially as specified.

5. The metal strap-clip D having folds d at its ends embracing one beam or bar, and a flange d', crosswise of said clip, provided with an eye d2 to receive a crossing bar or beam at an angle to the plane of said flange d', sub- 15 stantially as specified.
HERBERT A. STREETER.

Witnesses:

H. M. MUNDAY, The second of th L. E. CURTIS.