No. 796,468. PATENTED AUG. 8, 1905.

H. A. STREETER.

SHEET METAL CLIP.

APPLICATION FILED APR. 11, 1904.

Fig. 2

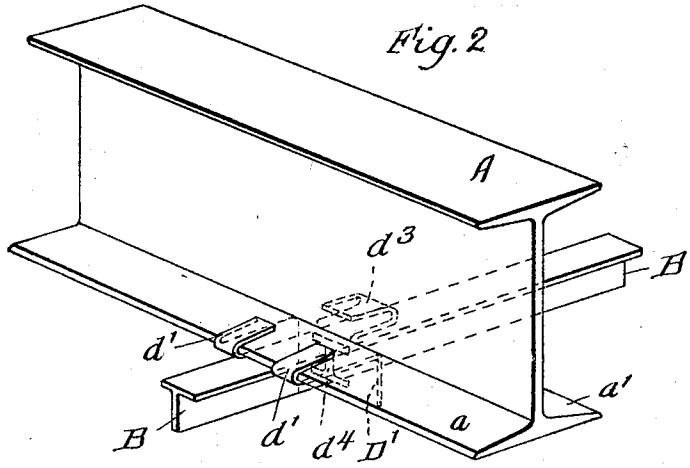


Fig. 3

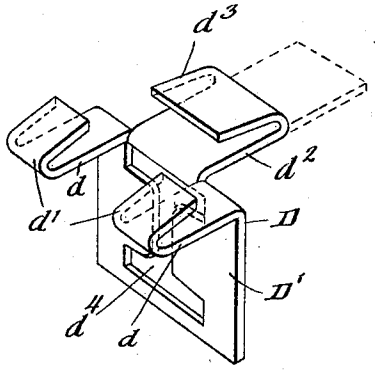


Fig. 4

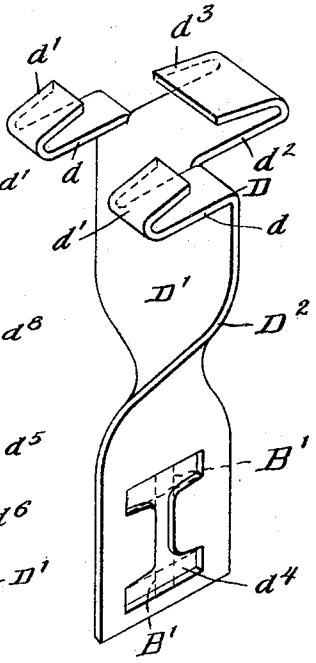


Fig 5

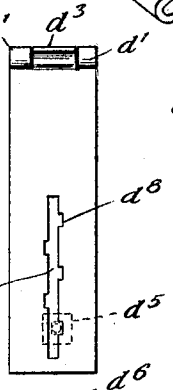


Fig 6

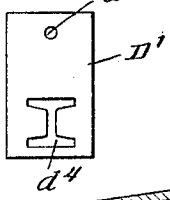
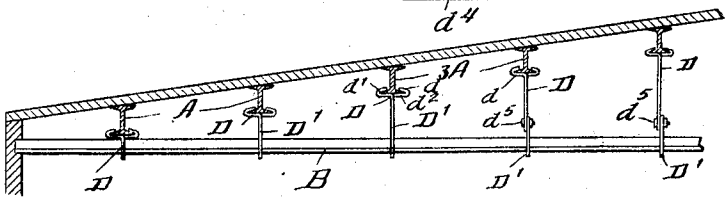


Fig. 1



Witnesses:

Wm. Geiger

H. W. Munday.

Inventor

Herbert A. Streeter

By Munday, Evarts & Adcock.

Attorneys

ANDREW B. GRAHAM CO., PHOTO-LITHOGRAPHERS, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HERBERT A. STREETER, OF CHICAGO, ILLINOIS.

SHEET-METAL CLIP.

No. 796,468. Specification of Letters Patent. Patented Aug. 8, 1905.

Application filed April 11, 1904. Serial No. 202,650.

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 Illinois, have invented a new and useful Improvement in Sheet-Metal Clips, of which the following is a specification.

My invention relates to improvements in sheet-metal clips for securing together or suspending one from another crossing beams or bars of buildings.

The object of my invention is to provide a sheet-metal clip of a simple form and construction by means of which crossing beams or bars of buildings may be secured together or suspended one from another at varying distances apart and which may be quickly and conveniently applied and which will at the same time afford great strength and security.

My invention consists in the means I employ to accomplish this result—that is to say, it consists in the novel construction of parts and devices and in the novel combinations of parts and devices herein shown and described and more particularly specified in the claims.

In the accompanying drawings, forming a part of this specification, Figure 1 is a sectional elevation of a building construction embodying my invention and showing a ceiling beam or bar supported from roof beams or bars at varying distances from the ceiling beam or bar by sheet-metal clips having their ceiling-bar-receiving members of varying lengths. Fig. 2 is an enlarged perspective view showing the ceiling and roof beams at one crossing and the clip uniting the same. Fig. 3 is a detail perspective view of the clip. Fig. 4 is a detail perspective view showing the lower bar-receiving member of the clip twisted to receive the lower or crossing beam at a different angle than a right angle, and Figs. 5 and 6 are detail views showing one of the longer clips made with adjustable members.

In the drawings, A A represent, for example, parallel roof beams or bars of a building. These beams or bars may be of any desired form in cross-section—as, for example, I-beams, T-beams, or channel-beams.

B B represent ceiling or suspended beams or bars crossing the beams A at any suitable angle—as, for example, a right angle. The beams or bars B may likewise be of any suitable form in cross-section—as, for example, T-beams, I-beams, channels, or plain flat bars or round bars or pipes. In the drawings the crossing-beam B is represented as a T-beam. The beams or bars B are represented as extending horizontally for supporting the ceiling, and as a consequence the beam B is at varying distances from the several roof-beams A A.

D represents a sheet-metal clip having on one side two flanges $d\,d$, furnished with folds $d'\,d'$ to embrace one of the flanges or edges a of the beam A, and an intermediate flange d^2 on its opposite side, furnished with a fold d^3 to embrace the other edge or flange a' of the beam A. The sheet-metal clip D has a crossing or suspended bar receiving portion D′, furnished with an eye or opening d^4 to receive the suspended crossing or ceiling beam or bar B. The eye or opening d^4 is preferably of I shape, as it is thus adapted to receive a beam or bar either I shape or T shape or channel form or of plain rectangular form in cross-section, and it should be understood, also, that with this I form of opening d^4 a plain, flat, or rectangular bar B may be inserted through the opening with its flat face upright or with its flat face horizontal, as indicated by the dotted lines B′ B′ in Fig. 4. The crossing suspended or ceiling bar receiving portion D′ of the several clips D D is made of varying lengths to correspond to the varying distances vertically between the beams A A and the beam or bar B at different points of the length of the bar B, as will readily be understood from Fig. 1 of the drawings. In cases where the beams or bars A B cross each other at other angles than a right angle or extend in different directions to each other than a right angle the bar-receiving portion D′ of the clip is given a twist D^2, as illustrated in Fig. 4, to correspond to the angle required. By giving this twist D^2 the extent of a right angle the bars A and B may be suspended or connected together parallel to each other, as desired. As the clip D has two folded flanges $d\,d$ on one side and a single folded flange d^2 on the opposite side intermediate of the folded flanges $d\,d$, when the clip is applied to the beam or bar A it is held rigidly in place and cannot be turned out of position, which is a matter of convenience in threading or inserting the bars B through the openings d^4 in the clips D.

The clips D, especially the longer ones, preferably have the bar-receiving members D′ in a separate piece adjustably secured to the main portion of the clip D by a bolt or rivet

d^5, which passes through a hole d^6 in the part D′ and through a slot d^7 in the part D, said slot having notches d^8 at intervals, so that the length of the clip as a whole may be adjusted as required, according to the distance between the beams or bars A B.

I claim—

1. The combination with bars or beams A A, of a bar or beam B crossing said beams or bars A A at different distances therefrom, and sheet-metal clips D D connecting said beams or bars, and having each a pair of flanges d d on one side furnished with folds d' d', and an intermediate flange d^2 on the opposite side having a fold d^3, said clips D D having bar-receiving members D′ D′ of different lengths, furnished with eyes or openings d^4 to receive the beam B, one or more of said clips D having a notched slot, and furnished with a bar-receiving member D′ adjustably secured thereto, substantially as specified.

2. The combination with bars or beams A A, of a bar or beam B crossing said beams or bars A A at different distances therefrom, and sheet-metal clips D D connecting said beams or bars and having each a pair of flanges d d on one side furnished with folds d' d', and an intermediate flange d^2 on the opposite side having a fold d^3, said clips D D having bar-receiving members D′ D′ of different lengths, furnished with eyes or openings d^4 to receive the beam B, substantially as specified.

HERBERT A. STREETER.

Witnesses:

H. M. MUNDAY,

EDMUND ADCOCK.