

A. ATKINSON.
REINFORCEMENT.
APPLICATION FILED SEPT. 27, 1911.

1,024,663.

Patented Apr. 30, 1912.

Fig. 1.

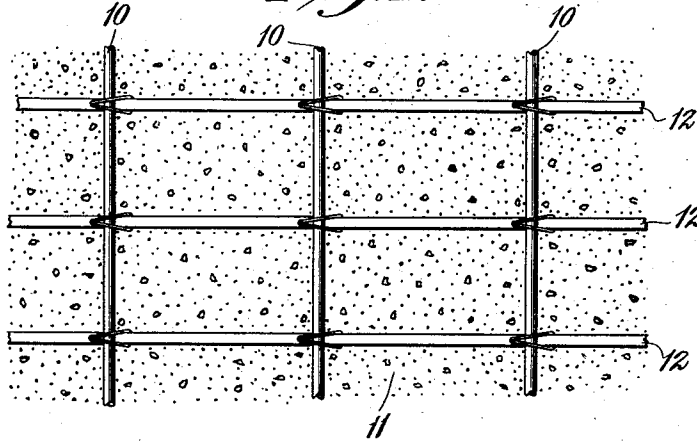


Fig. 2.

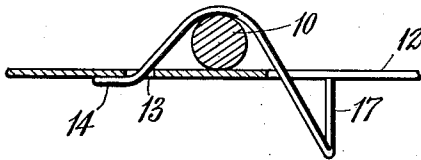


Fig. 5.

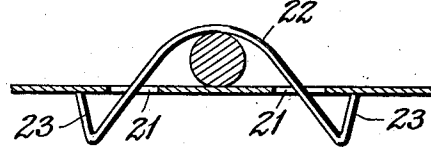


Fig. 3.

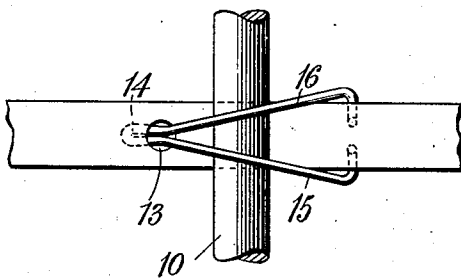


Fig. 6.

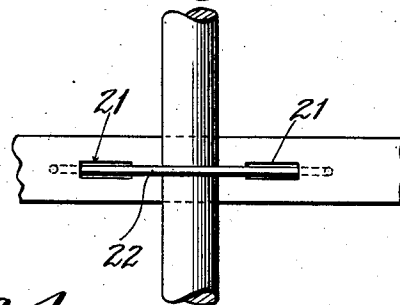
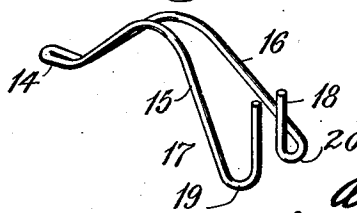


Fig. 4.



Witnesses:
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UNITED STATES PATENT OFFICE.

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REINFORCEMENT.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ASHER ATKINSON, a citizen of the United States, residing at New Brunswick, county of Middlesex, and State of New Jersey, have invented certain new and useful Improvements in Reinforcements, of which the following is a full, clear, and exact description.

The invention, which forms the subject matter of the application, relates to a spacer and clip for reinforcements and while it is especially adapted to support bars it is not specifically limited to such use.

The object of my invention consists in spacing and supporting the metal reinforcements of the concrete in proper position both with relation to each other as well as with the centering or casing which serves as a form for the concrete structure.

Referring to the drawing wherein like characters refer to the same part in all the views, Figure 1 is a top plan view showing the manner of applying my invention in reinforcing a concrete floor or other structure. Fig. 2 shows a sectional view thereof. Fig. 3 shows a top plan view of the spacer in assembled relation. Fig. 4 shows a perspective view of the spacer. Figs. 5 and 6 are views of a modification.

Referring to Figs. 1 to 4 inclusive the character 10 designates reinforcing bars for the concrete flooring, roofing, or other body 11 suitably spaced from each other and running substantially parallel. Extending crosswise and below the reinforcing bars are the spacers 12 made of light flexible hoop iron. These spacers have perforations 13 therein at convenient distances and serve to receive the reduced end 14 of the clip. The clip has two arms 15 and 16 which have the upwardly extending supporting legs or members 17 and 18. The central portion, that is the portion between the reduced portion 14 and the members 17 and 18 is curved upwardly and then downwardly the points 19 and 20 where the arms unite with members 17 and 18 being considerably lower than the point 14. The height to which the reinforcements 10 are to be placed is determined by the length of the supporting legs 17 and 18, and it is obvious that the clip can be made to suit the particular job upon which it is to be used. The members 17 and 18 abut against the under side of the spacers 12 with the reinforcements 10 located be-

tween said spacers and the arms of the clip. In assembling the spacers 12 are placed the proper distances apart and the bars 18 placed upon them in parallel relation to each other and at a distance apart determined by the position of the holes 13 in said spacers 12. It is obvious that a plurality of holes may be made to permit a reduction or increase of the distance between the individual bars. When the bar is placed adjacent the perforation the reduced end 14 is inserted in said perforation with the curved portion of the clip extending around the bar. The other end of the clip, which extends inwardly at 19 and 20, (see Fig. 3) is spread apart, if it is of flexible material, and the supporting legs 17 and 18 placed under the spacer with the central portions of the arms pressing against the sides of said spacer. Preferably the clips are made of non-flexible but pliable material inasmuch as the flexible clips require considerably more time in assembling while with the non-flexible clips the arms can be made such a distance apart that the spacer will readily pass between the members 17 and 18 and then it is only necessary to squeeze them together.

In Figs. 5 and 6 is shown a modified arrangement. In this case the spacer is provided with two perforations 21, one located on each side of the bar 10. The clip 22 itself is much simplified in that it consists of only one arm curved as in the preferred form, and having the upwardly extending members 23. The same may be made of resilient material and when the ends thereof, which form the support for the reinforcements, are inserted through the perforations 21 it will assume the position indicated in the drawing. It will therefore be seen that I have not only provided a clip which allows the reinforcements to be made on the job, and one which is easy to assemble, but it will also be noted that the cost is reduced to a minimum. The clip itself as well as the spacer used in connection therewith may be made from a cheap grade of material and serve equally well the purpose for which they were intended. Not only do the bars 10 but the clips and metal strips serve as reinforcements, forming a sort of net-work arrangement. The size and strength of materials are not important and with this construction very little strength is required on the part

of the clips and spacers; or if needs be materials of increased size and strength may be used.

While the embodiments herein described are the preferred forms of the invention it is to be understood that I do not limit myself to the exact constructions shown, as changes can be made in point of detail without departing from the true spirit and scope of the invention.

What I claim is:

1. In a spacing and supporting device for concrete reinforcements comprising a bar, a metal strip below said bar and supporting the same, a member bent together at one end to project through a perforation in the metal strip and having arms curved first upwardly and then downwardly over the reinforcing bar to a point beyond a horizontal plane passing through the portion projecting through the perforation in the metal plate, and supporting legs upon said downwardly extending portion of the arm to support the metal strip.

2. In a concrete reinforcing means, in combination, a reinforcing bar, a metal strip below said bar and supporting the latter, said strip having a perforation adjacent said bar, a clip, one of the ends of which passes through the perforation, the intermediate portion of which passes over the said rein-

forcing bar and the other end of which passes downwardly and is provided with an upwardly extending supporting member, substantially as described.

3. In a concrete reinforcing means, in combination, a reinforcing bar, a metal strip below said bar and supporting the latter, said strip having a perforation adjacent said bar, a clip comprising arms one of the ends of which passes through the perforation, the intermediate portion of which passes over the said reinforcing bar and the other ends of which pass downwardly and are provided with upwardly extending supporting members, substantially as described.

4. In a device of the character described, a bar, a metal strip below said bar and supporting the same, a clip comprising curved arms, said arms converging at one end and adapted to enter a perforation in said metal strip, said arms diverging at the other end and extending substantially below said metal strip, and supporting legs extending upwardly from the last named ends adapted to support the metal strip.

In testimony whereof I affix my signature in the presence of two subscribing witnesses.

ASHER ATKINSON.

Witnesses:

M. LAWSON DYER,
WM. BOHLEBER.