

UNITED STATES PATENT OFFICE.

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CLIP FOR SPRINGWORK.

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To all whom it may concern:

Be it known that I, ALFRED FRESCHL, a citizen of the United States of America, and a resident of Chicago, county of Cook, State of Illinois, have invented certain new and useful Improvements in Clips for Springwork, of which the following is a specification.

The object of my invention is a clip for connecting the upper coils of coiled springs together so as to form a flat and flexible surface, said clip being constructed in a manner such that it may be quickly and accurately secured in position upon the springs with a minimum amount of tools and which likewise is of a construction which lends itself readily to clips of various lengths for making couches of different widths without changing the size or character of the springs.

Referring to the accompanying drawings, in which like parts are indicated by similar reference-letters, Figure 1 is a plan view of a section of springwork, showing the springs coupled together by clips embodying my invention. Fig. 2 is a detail plan view, upon an enlarged scale, with one of the plates of the clip removed. Fig. 3 is a sectional view upon line $x-x$, Fig. 2, showing the clip coupling two springs. Fig. 4 is an enlarged detail side elevation of a clip embodying my invention, showing it in the form it appears before engaging the springs. Fig. 5 is a view similar to Fig. 1 of a modified form of clip. Fig. 6 is a view similar to Fig. 2 of the same. Fig. 7 is a detail plan view of the clip illustrated in Figs. 5 and 6.

Referring to the parts, the clip consists of an upper octagonal-shaped plate A and a lower plate A', similarly shaped, joined together along one side a . From the three alternate sides from side a plate A has downwardly-projecting tangs a' a'' a''' , which when the plates are brought together register with the sides a^4 , a^5 , and a^6 of plate A'. Both plates A and A' have substantially right-angled grooves a^7 , a^8 , a^9 , and a^{10} , struck up from plate A and downward in plate A', the grooves lying between sides a a^4 , a^4 a^5 , a^5 a^6 , a^6 a in the lower

plate and being similarly situated between the tangs a' a'' a''' in the upper plate, so that when the plates are brought together the 50 grooves in the upper plate register with those in the lower.

In the modification shown in Figs. 5 to 7 the side a^{11} , corresponding to side a , and the opposite side a^{12} are increased in length, leaving 55 an extent of metal a^{13} between the grooves in both the upper and the lower plates A² and A³.

In operation the side a coupling the plates A and A' causes them to occupy a position relatively to each other similar to that shown 60 in Fig. 4. In securing this clip in place it is seen that it may be readily placed over the springs, with the grooves in the lower plate registering with the springs. Then the upper plate is forced down against the lower 65 plate, and the tangs thereon are turned over the lower plate. The side a connecting the plates hold them positively in alinement with each other, so that there is no difficulty experienced in causing the grooves in the upper 70 plate to register with the grooves in the lower plate and the tangs upon the upper plate to contact the proper sides a^4 a^5 a^6 upon the lower plate. The construction likewise renders the relative position of the plates more firm after 75 they have been clamped together, so that there is no tendency for the same to slip relatively to each other.

In the modification in Figs. 5 to 7 it is seen that couches of varying width may be made 80 without changing the style or character of the springs, but simply by using the clip of a greater length.

What I claim is—

1. A clip for springwork consisting of an 85 upper and a lower plate hinged together at one side, the plates being grooved to form ways for the springs, one plate having tangs at its edges adapted to be bent over the other plate.

2. A clip for springwork consisting of two 90 angular plates having at one side a connecting integral tongue, one plate having tangs along its edges and adapted to engage the other plate, each plate having right-angled grooves

formed in it, the grooves in one plate registering with those in the other to form ways for the reception of the springs.

3. A clip for springwork consisting of two
5 .octagonal plates hinged together along one side, one plate having tangs formed upon alternate sides and both plates having right-angled grooves intersecting the sides alternating

with the tangs, the grooves in one plate registering with the grooves of the other to form ways for the reception of springs.

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Witnesses:

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