

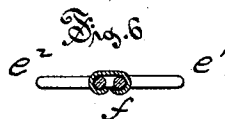
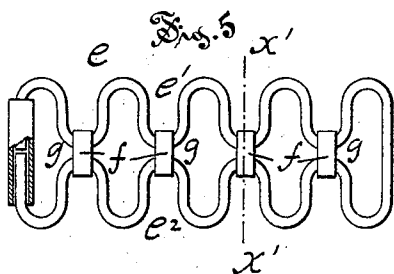
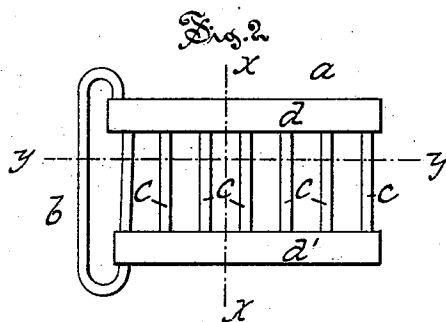
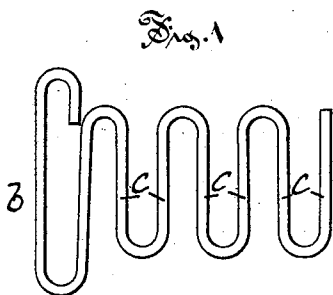
(No Model.)

S. A. CHAPMAN.

CATCH PLATE FOR SHOE CLASPS.

No. 346,983.

Patented Aug. 10, 1886.



Witnesses:

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UNITED STATES PATENT OFFICE.

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CATCH-PLATE FOR SHOE-CLASPS.

SPECIFICATION forming part of Letters Patent No. 346,983, dated August 10, 1886.

Application filed June 5, 1886. Serial No. 204,198. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL A. CHAPMAN, of Waterbury, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Catch-Plates for Shoe-Clasps, of which the following is a full, clear, and exact description, whereby any one skilled in the art can make and use the same.

My improvement relates more particularly to the class of shoe-clasps ordinarily used on overshoes of the style called "arctics," on brogans, and on like articles of foot-wear.

The object of my improvement is to provide a wire catch-plate or take-up for use in shoe-clasps; and to this end my improvement consists in a take-up made of wire bent to and fro across the length of the device to form cross-wise holding-bars, the parts being held together by straps or lengthwise strips of metal folded upon or about them, as more particularly hereinafter described, and pointed out in the claims.

Referring to the drawings, Figure 1 is a plan view of part of one form of my improvement, showing the wire bent to form the crosswise holding-bars. Fig. 2 is a plan view of this wire frame with the metallic strips or hem secured thereto. Fig. 3 is a view in cross-section of the take-up on the plane denoted by line *xx* of Fig. 2. Fig. 4 is a view in longitudinal section of the take-up on the plane denoted by line *yy* of Fig. 2. Fig. 5 is a plan view of a modified form of my improvement, the frame being formed in this instance by intumed bends of the wire on opposite sides of the frame. Fig. 6 is a view in cross-section through the holding-strap of the frame on plane denoted by line *x'x'* of Fig. 5.

In the accompanying drawings, the letter *a* denotes one form of my improved catch-plate or take-up, in which form the strap-loop *b* and the cross-bars *c* are formed by bending the wire, that is of convenient size as to cross-section and is preferably of iron, brass, or steel, back and forth across the length of the plate, while the side parts *d d'* of the frame of the take-up are composed of strips of thin metal arranged one on each side of and along the

frame. These side parts *d d'*, or "hems," as they may be termed, are made of comparatively narrow strips of thin metal bent first to *C* shape, so that when either piece is slipped upon the edge of the take-up one branch of the hem lies along the edge upon the upper side of the take-up and the other on the under side of the edge. By means of suitable tools, that are of ordinary construction, this hem or binding-strip is closed down upon the frame, preferably so as to clasp the several cross-bars *c* and the bends between them, as illustrated in sectional view in Fig. 4. The function of these side parts is to give to the take-up a certain rigidity, strength, and power to resist a pulling strain, such as would naturally result from the use of the take-up in a shoe-clasp where it and the tongue are fast to opposing parts of the shoe, and bring, when hooked together, a lengthwise strain upon the take-up.

When the take-up is made in the form above described, it is obvious that the intervals between the cross-bars may be very small, limited only by the thickness of the tongue, and this forms one advantage of my improvement. A further advantage is due to the fact that there is no waste of metal in making such a take-up, the wire being preferably a continuous piece, while the form of the side strips enables them to be cut from sheets of metal with absolutely no waste, and this enables me to produce a very cheap device, as compared with sheet-metal catch-plates or take-ups, in which the opening for the loop and for the entrance of the tongue are formed by cutting out pieces of metal, that are wasted, no less than forty per cent. of the metal in the latter case being wasted.

In the modified form of my improved take-up shown in Figs. 5 and 6 the frame *e* is made of wire, with the cross-bars formed one-half on the opposite sides of the center line of the take-up by intumed bends from the side parts *e' e''* of the frame. In order to give rigidity to this frame-work, I make use of the clasps *f*, that are closed upon and bind firmly together the adjacent ends of the loops *g*, that are bent inward from the opposite sides of the frame. In this modified form of my improvement the cross-bars cannot be arranged as near

together as in the form first described; but it has the advantage of not requiring the side parts or hem necessary to the first form.

I claim as my improvement—

- 5 1. In a shoe-clasp, a take-up or catch-plate made of wire, with crosswise holding-bars formed by bends in the wire, the bends being held in place and made rigid by stiffening strips or bands of metal, all substantially as de-
10 scribed.
2. The improved take-up or catch-plate made

of wire, with the integral strap-loop at one end of the device, and crosswise holding-bars formed of the back-and-forth bends of the wire across the width of the frame, the edges of the 15 frame having the hem or stiffening-strip of sheet metal clasped upon the wire, all substantially as described.

SAMUEL A. CHAPMAN.

Witnesses:

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