J. A. HUNT. CLAMP FOR BICYCLE SADDLES.

No. 601,890. Patented Apr. 5, 1898. 2' Fig. 1. 2 3 . Fig. 2. Fig. 3. Fig. 5. Fig. 4. Fig. 6. Inventor Witnesses J. El. Fenne By his Extorney John-

## UNITED STATES PATENT OFFICE.

JONATHAN A. HUNT, OF WESTBOROUGH, MASSACHUSETTS.

## CLAMP FOR BICYCLE-SADDLES.

SPECIFICATION forming part of Letters Patent No. 601,890, dated April 5, 1898.

Application filed January 25, 1897. Serial No. 620,596. (No model.)

To all whom it may concern:

Be it known that I, JONATHAN A. HUNT, a citizen of the United States, residing at Westborough, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Clamps for Bicycle-Saddles, &c., of which the following is a specification.

My invention relates to a clamp, and more 10 particularly to a clamp for attaching the spring of a bicycle-saddle to the saddle post or support on the bicycle-frame; and the object of my invention is to make a clamp of simple and inexpensive construction; and my 15 invention consists in certain novel features of construction of my clamp, as will be hereinafter fully described.

Referring to the drawings, Figure 1 is a plan view of my clamp, a saddle-support upon which it is secured, and a double or two-rod spring secured in the clamp. Fig. 2 is a transverse section on line 2 2, Fig. 1, looking in the direction of arrow a, same figure. Fig. 3 is a transverse section on line 33, Fig. 1, 25 looking in the direction of arrow a, same fig-Fig. 4 is a vertical section on line 4 4, Fig. 2, looking in the direction of arrow b, same figure. Fig. 5 shows a side or edge view of the clamp easing or shell before the collar or band is applied thereto and the clampingbolt and blocks or jaws combined therewith, and Fig. 6 shows a side view of the block or jaw against which the inner end of the clamp-

In the accompanying drawings, 1 is the tubular saddle-support, of any ordinary construction. 2 is the spring, which is also of well-known shape and construction and made of two substantially parallel rods 2' 2', which 40 are preferably circular in cross-section and extend in the same horizontal plane.

My improved clamp consists of the casing or shell 3, which in its completed form is preferably of substantially elongated diamond 45 shape, with an extension 3' on one side or end thereof. The extension 3' is preferably of tubular shape and is screw-threaded internally to receive the clamping screw or bolt 4. (See Fig. 3.)

In practice I prefer to make the shell 3 out of a flat strip or piece of steel, which is bent

two free ends before or after the bending compressed and shaped to make a tubular extension, which is split longitudinally, as shown 55 A collar or band 5 is then secured in Fig. 6. on the tubular extension 3' to draw together and rigidly hold the two parts thereof, and the interior of the tubular extension is threaded to receive the clamping-bolt 4.

The outer or exterior corners or projections of the shell 3 are preferably rounded, and the interior angles or recesses are also preferably. made rounded, as shown in Fig. 6.

Combined with the casing or shell 3 and 65 the clamping-bolt 4 to secure the support 1 in the clamp and at the same time to secure the two rods of the spring 2 in the clamp and also to the support are two removable blocks or jaws 6 and 7, which extend through the shell 70 3, one on each side of the support 1.

Each block 6 and 7 is recessed or grooved on its inner surface or edge to receive the tubular support 1 and is also recessed or grooved on its outer surface or edge to receive 75 the rods 2' of the spring 2. (See Figs. 2 and 3.)

The ends of the blocks 6 and 7 are preferably provided with lips or flanges 6' and 7' to extend over the edges of the shell 3 and prevent said blocks from moving longitudinally 80 or slipping out of the shell 3 after the support 1 is inserted between them.

A third block or jaw 8 is preferably used in connection with the blocks 6 and 7. The block 8 has one edge or surface grooved or re- 85 cessed to receive one rod 2' of the spring 2. The opposite surface or edge of the block 8 is preferably rounded or convex to fit into the rounded end of the shell 1 and has in this instance an extension 8' thereon, circular in 90 cross-section, which extends into the tubular extension 3' of the casing 3. The end of the clamping-screw 4 bears against the end of the extension 8'. (See Fig. 3.)

From the above description, in connection 95 with the drawings, the operation of my clamp will be readily understood by those skilled in

The block or jaw 8 is preferably first placed in the shell 3 with the extension 8' extending 100 into the tubular extension 3'. (See Fig. 3.) The free ends of the spring 2 are then inserted through the shell 3, and the blocks or jaws 6 over at its middle portion on itself and the and 7 are then placed in the shell with the

lips or flanges 6' and 7' overlapping the edges of the shell. The support 1 is then inserted between the blocks 6 and 7 and the clamp moved to the desired position on said support and the spring 2 moved to the desired position in the clamp. The clamping-bolt 4 is

sition in the clamp. The clamping-bolt 4 is then screwed in, and the end thereof bears against the extension 8' on the block 8 and acts to communicate direct pressure in a horizontal plane to the clamping-jaws and forces

zontal plane to the clamping-jaws and forces said block inwardly against one rod 2' of the spring 2 and, through said rod, forces the block 7 against the support 1 and the support 1 against the block 6 and the block 6 against the other rod 2' of the spring 2 and said rod

5 the other rod 2' of the spring 2 and said rod 2' against the end of the shell 3, (see Fig. 3,) thus clamping and holding the several parts.

It will be understood that the details of construction of some of the parts of my clamp 20 may be varied, if desired, and the shape thereof may be varied somewhat. The movable block 8 may be dispensed with and the inner end of the bolt or screw 4 bear directly on the rod 2' to force it against the block 7.

Instead of a spring of two rods 2' 2' a spring with two pairs of smaller rods may be used, in which case the outer edges of the blocks 6 and 7 will have two recesses or grooves to receive the two rods.

30 Having thus described my invention, what

I claim as new, and desire to secure by Letters

Patent, is—

1. In a clamp for bicycle-saddle springs, the combination with the casing or shell split or divided at one side or end, and having a tubular internal-threaded extension on said divided end, and a collar or holding-band thereon, and a bolt turning in said tubular extension, to communicate direct pressure in a horizontal plane, to the clamping-jaws, of two clamping blocks or jaws having grooved or recessed inner edges, and grooved or recessed outer edges, substantially as shown and described.

2. In a clamp for bicycle-saddle springs, the 45 combination with the easing or shell split or divided at one side or end, and having a tubular internal-threaded extension on said divided end, and a collar or holding-band thereon, and a clamping-bolt turning in said tubular extension, of two clamping blocks or jaws having grooved or recessed inner edges, and grooved or recessed outer edges, and a third clamping-block, against which the inner end of the clamping-bolt bears, substantially as 55 shown and described.

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Witnesses:

J. C. DEWEY, M. J. GALVIN.