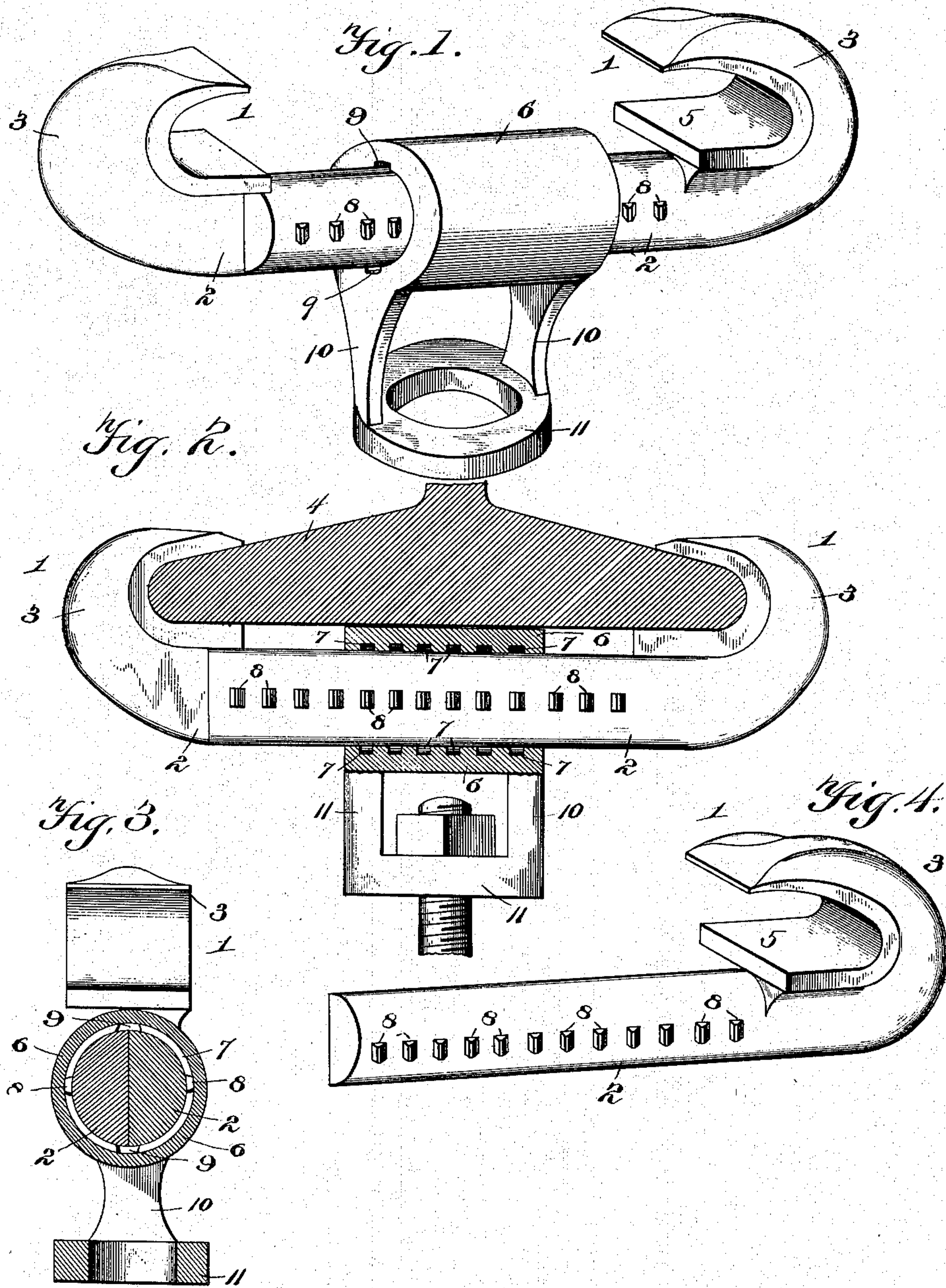


(No Model.)

A. B. CARLL.
ADJUSTABLE BEAM CLAMP.

No. 559,025.

Patented Apr. 28, 1896.



Witnesses
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UNITED STATES PATENT OFFICE.

ADDISON B. CARLL, OF BROOKLYN, NEW YORK.

ADJUSTABLE BEAM-CLAMP.

SPECIFICATION forming part of Letters Patent No. 559,025, dated April 28, 1896.

Application filed January 20, 1896. Serial No. 576,207. (No model.)

To all whom it may concern:

Be it known that I, ADDISON B. CARLL, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented a new and useful Adjustable Beam-Clamp, of which the following is a specification.

This invention relates to an improvement in adjustable beam-clamps, and has for its object to provide an improved article of the character referred to, which is composed of sections slidingly related to each other, so that they may be adjusted to fit any size of beam and securely held at any desired adjustment by a novel form of fastening device, the latter also comprising the socket or support for the suspending device.

Other objects and advantages of the invention will appear in the course of the subjoined description.

The invention consists in an improved beam-clamp embodying certain novel features and details of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and finally pointed out in the claims hereto appended.

In the accompanying drawings, Figure 1 is a perspective view of the improved adjustable beam-clamp in the preferred form. Fig. 2 shows the same in elevation applied to an overhead beam in section. Fig. 3 is a transverse section through the clamp *per se*. Fig. 4 is a detail perspective view of one of the sliding sections of the clamp.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

Referring to the accompanying drawings, the improved clamp is made in twin sections 1, each section comprising a longitudinal shank portion 2, which is semicylindrical in cross-section, and a U-shaped or hooked terminal portion 3. The terminal portion 3 of each section is approximately of twice the width or thickness of the shank portion, and the inner working face of the hook is flattened transversely so as to afford a wide bearing of the said hook against the base-flange of the beam. (Indicated in cross-section at 4.) The base of the hook is also elevated or slightly

removed or offset from the shank 2, as shown at 5, the purpose of which will hereinafter appear.

The inner adjacent meeting faces of the two clamp-sections are flat and disposed flatwise against each other, being preferably left smooth, so that they may slide upon and be adjusted relatively to each other. When the shank portions of the sections are brought together, as shown in Fig. 1, they form a body which is, preferably, cylindrical in cross-section, whereby they are adapted to be received in and surrounded by a sleeve 6. The bore of this sleeve corresponds to the external diameter of the combined shanks 2 and is formed within said bore with a series of annular grooves or kerfs 7, adapted to engage with teeth 8 on the outer rounded surfaces of the shanks 2, the said teeth being located at intervals corresponding to the intervals of the grooves 7. The sleeve 6 is also formed with longitudinal grooves 9, diametrically opposite to each other, or so disposed that when the sleeve is turned into a certain position the grooves 9 will register with and receive the teeth 8, thus adapting the sleeve to be moved longitudinally upon the shanks 2 of the clamp-sections, or, in other words, adapting the said shanks to be moved longitudinally through the sleeve 6 and slid upon and adjusted relatively to each other. In this manner the distance between the hooked terminal portions of the sections 1 may be varied at will, and when brought into the desired relation the sleeve 6 may be partially rotated, so as to bring the grooves 7 thereof into engagement with the teeth 8, thus locking the sections firmly in their adjusted positions.

The bases of the hooked terminals of the sections are arranged approximately in the plane of the upper outer surface of the sleeve 6, so that the latter will not interfere with the proper application of the clamp to the beam. The sleeve 6 is formed with depending portions 10 at each end, and these portions are united at their lower ends in an annular or ring-shaped base 11. This construction adapts the bolt or shank of the pipe-hanger or other suspending device to be inserted through the central opening in the base 11

and to receive a nut upon its upper end, the said nut being inserted in the space between the upper surface of the base and the exterior surface of the sleeve in a manner that
5 will be readily understood.

In applying the device to a beam the sleeve is turned until the grooves 9 register with the teeth 8, after which the opposing sections of the clamp are slid upon each other until the
10 hooked terminals thereof are brought into firm engagement with the base-flange of the beam. The sleeve 6 is now given a quarter-turn until brought into the position shown in the drawings, whereupon the said sections are
15 locked securely together and prevented from spreading and releasing their grip upon the beam. The pipe-hanger or other suspending device may now be introduced, as above described. The extremities of the hooks 3 are
20 preferably sharpened or brought to an edge, as shown, so that they may be driven to place where the beam is embedded in brickwork.

Changes in the form, proportion, and minor details of construction may be resorted
25 to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed as new is—

1. A beam-clamp comprising two similar
30 sections having their ends formed to engage a beam and provided with overlapping portions having a longitudinal sliding relation, and a sleeve surrounding said overlapping portions and adapted to engage and lock the

same, substantially as and for the purpose 35 described.

2. An adjustable beam-clamp, comprising two similar sections formed to engage a beam and having overlapping portions slidably related to each other and provided each with
40 a plurality of teeth, and a sleeve surrounding said overlapping portions and mounted to turn thereon, the said sleeve being formed with annular grooves within its bore and being also provided within said bore with longitudinal grooves adapted to be brought into
45 alinement with the teeth of the clamp-sections, substantially as and for the purpose described.

3. An adjustable beam-clamp, comprising 50 two similar sections having their terminal portions formed to engage a beam and provided with overlapping shanks having a sliding relation to each other and being substantially semicylindrical in cross-section, and a
55 sleeve surrounding said overlapping shanks and having provision for locking the same together, the said sleeve being provided with a socket for the reception of a suspending device, substantially as described. 60

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ADDISON B. CARLL

Witnesses:

ERNEST E. THOMAS,
SAMUEL J. HARVEY.