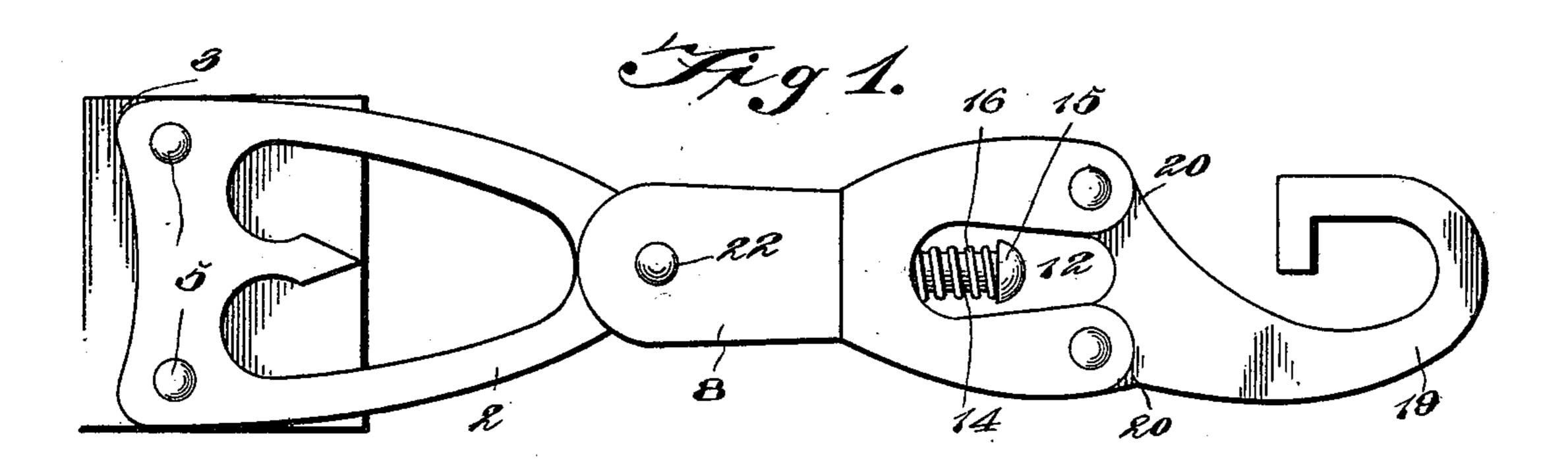
No. 665,487.

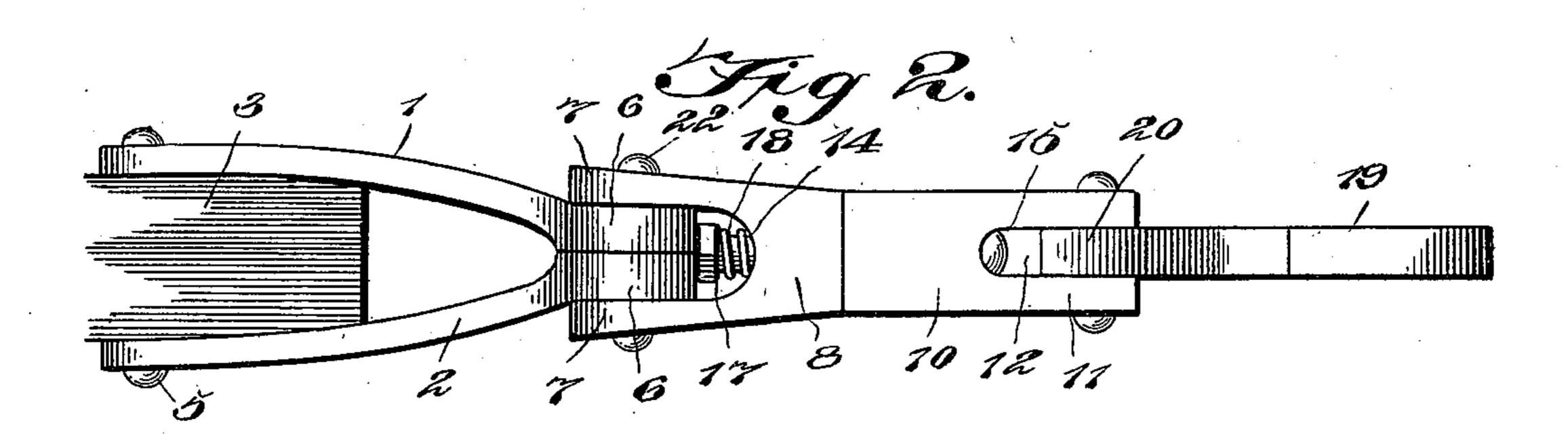
Patented Jan. 8, 1901.

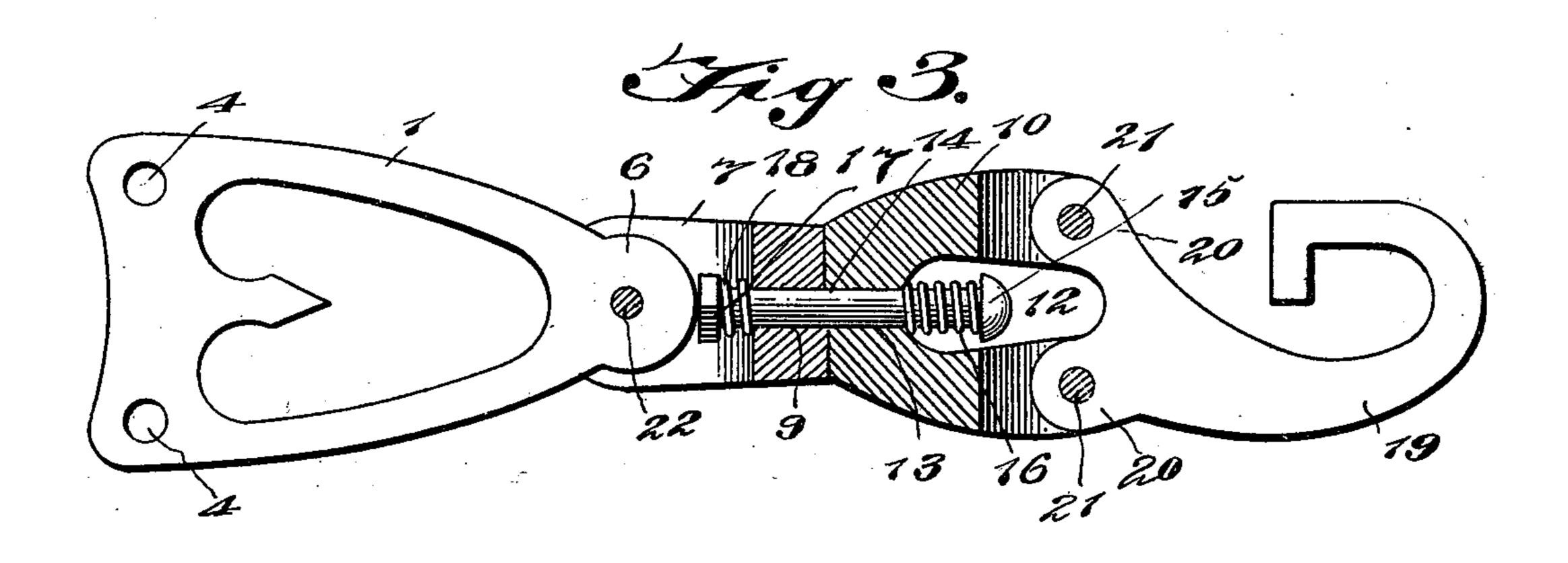
H. O. TROWBRIDGE. CLEVIS.

(Application filed May 8, 1900.)

(No Model.)







Mitnesses
Maupin.

Lepard.

enry Trowbridge Inventor

by Attorneys

United States Patent Office.

HENRY O. TROWBRIDGE, OF MILLERTON, PENNSYLVANIA.

CLEVIS.

SPECIFICATION forming part of Letters Patent No. 665,487, dated January 8, 1901.

Application filed May 8, 1900. Serial No. 15,928. (No model.)

To all whom it may concern:

Be it known that I, HENRY O. TROWBRIDGE, a citizen of the United States, residing at Millerton, in the county of Tioga and State of Pennsylvania, have invented a new and useful Clevis, of which the following is a specification.

This invention relates to draft appliances, and is especially designed to provide an improved clevis for application to plows and other agricultural implements. It is furthermore designed to provide a longitudinally-yieldable device to relieve the strain from the draft-animals instarting the implement or vehicle and to permit of a lateral bending or flexing and also a twisting of the draft connection, so as to accommodate the latter to the varying movements of the draft-animal.

20 With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a side elevation of the improved clevis. Fig. 2 is a top plan view thereof, and Fig. 3 is a longitudinal sectional view of the clevis.

Corresponding parts in the figures of the drawings are designated by like characters of reference.

Referring to the accompanying drawings, 1 and 2 designate the opposite sides or members of the fixed portion of the clevis, which are designed to embrace the forward end of a plow-beam 3 or other draft-bar. Each member is in the form of a skeleton plate, which is provided with perforations 4 for the reception of suitable fastenings 5, whereby the plates may be secured to the plow-beam. The forward portions of the plates converge outwardly beyond the end of the plow-beam and are provided at their outer extremities with corresponding eyes 6, which are normally in engagement with each other.

Embracing the combined eyes 6 are the

arms 7 of a subtantially U-shaped link 8, which is provided with a flat outer end, through which extends a longitudinal bore 55 or opening 9. Fitted against the outer flat end of the link 8 is another reversely-arranged substantially U-shaped link 10, which has its arms 11 provided with corresponding longitudinal slots 12, which are arranged at 60 substantially right angles to the main slot of the link. This latter link is also provided with a central bore or opening 13 to correspond with the bore of the former link, and the combined bores are designed to receive 65 a connecting pin or bolt 14, which forms a swiveled connection for the two links. One end of the pin is provided with a fixed head 15, which is arranged within the slot or bifurcation of either, link and between the head 70 and the adjacent side of the link is provided a coiled spring 16, which also encircles the pin. The opposite end of the pin is provided with a removable head in the form of a nut 17, and a coiled spring 18 embraces the pin 75 and bears in opposite directions against the head and the adjacent side of the link. By means of the removable head the two links may be conveniently separated, and the springs permit of a longitudinally-yieldable 80 movement of the links upon the connecting pin or bolt.

At the outer end of the device there is provided a hook 19 for connection with the draft animal or animals, and its rear end is prosided with the opposite arms 20, which are received within the bifurcated portion of the outer link and are connected thereto by means of suitable fastenings 21. It will of course be understood that the arms of the inner link 90 8 are pivotally or hingedly connected to the clevis-plates by means of a suitable pivot-pin 22, which passes loosely through the eyes 6 of the plates.

From the foregoing description it will be 95 seen that the draft connection has a vertical movement in opposite directions upon the hinged joint formed by the pivot-pin 22. The hook and the outer link are longitudinally and elastically yieldable upon the connecting 100 pin or bolt and also may be twisted, by reason of the swiveled connection between the two links, whereby the device is effectually arranged to accommodate itself to the various

movements of the draft-animals, and thereby relieve the latter of considerable strain.

What is claimed is—

1. A draft appliance, comprising a clevis or fixed member for application to a plow-beam or the like, a pair of links which are mutually swiveled together, one of the links having a hinged or pivotal connection with the clevis, and a hook connected to the other link.

10 2. A draft appliance, comprising a clevis or fixed member for application to a plow-beam or the like, a pair of links having corresponding openings, a bolt or pin loosely received within the corresponding openings, and provided with heads at its opposite ends, coiled

springs encircling the pin and bearing in opposite directions against the heads and the adjacent links, and a hook connected to the outer link.

3. A draft appliance, comprising a clevis or 20 fixed member for application to a plow-beam or the like, a substantially U-shaped link having its arms pivotally connected to the clevis, a second reversely-arranged substantially U-shaped link, a swivel bolt or pin 25 connecting the links, coiled springs encircling the opposite end portions of the pin or bolt and bearing in opposite directions against the pin and the adjacent links, and a hook, having a pair of arms that are secured within the bifurcation of the outer link.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in

the presence of two witnesses.

HENRY O. TROWBRIDGE.

Witnesses:

DELL WILSON, E. A. WILSON.