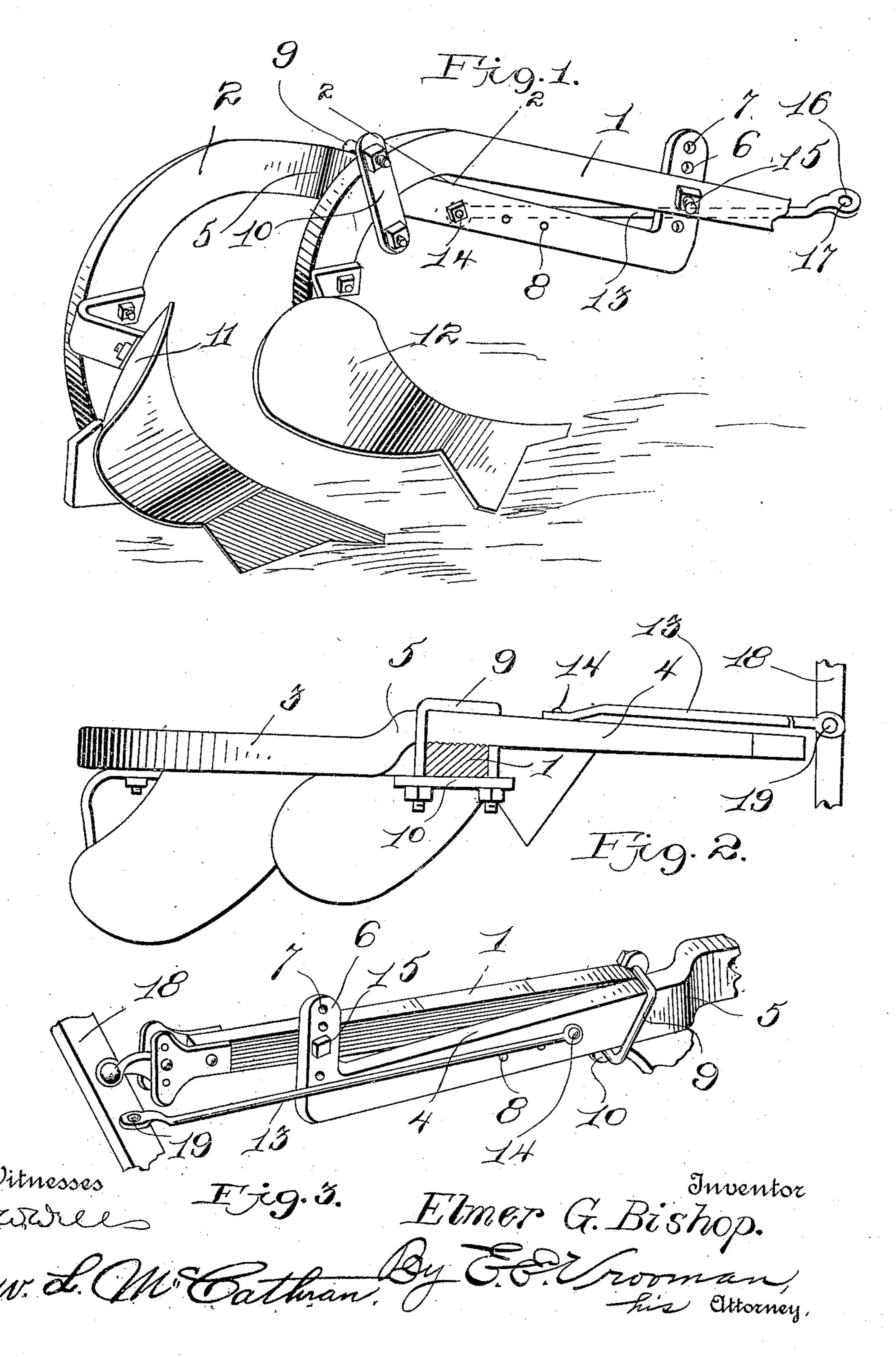
E. G. BISHOP. SUBSOILER.

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UNITED STATES PATENT OFFICE.

ELMER G. BISHOP, OF GORHAM, NORTH DAKOTA.

SUBSOILER.

953,893.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Elmer G. Bishop, a citizen of the United States, residing at Gorham, in the county of Billings and State of North Dakota, have invented certain new and useful Improvements in Subsoilers, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to plows and more particularly to sulky plows and has for its object the provision of means for facilitating the connecting of a subsoiler to a plow.

Another object of this invention is the provision of means for connecting the supplemental beam carrying the subsoiler to a double tree.

In the drawings: Figure 1 is a perspective view of the subsoiler connected to the main plow. Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1. Fig. 3 is a perspective of the beams showing the same connected together.

Referring to the drawings by numerals,
(1) designates the main plow beam and (2)
designates the supplemental beam. The
supplemental beam (2) comprises a main or
body portion 3 and an offset portion 4. The
portion (4) of the supplemental beam (2)
terminates at its outer end in an upstanding
portion (6) which is provided with a plurality of alined apertures (7). The horizontal portion (4) is also provided intermediate its ends with a plurality of alined
apertures (8).

The supplemental beam (2) is adapted to be secured to the main beam (1) by means of a substantially U-shaped clamp (9). A link member (10) connects the outer ends of 40 the U-shaped clamp member and firmly secures the two beams together. The adjacent surfaces of the beams 1 and 2 are corrugated or roughened so as to allow the same to be more firmly gripped together. The main 45 beam (1) is adapted to engage the supplemental beam near the junction of the offset portion (5) with the body portion 3 and it will be obvious that by having the beams connected at this place the forward move-50 ment of the supplemental beam will be limited.

The mold board of the plow carried by the supplemental beam is rolled or bent as indicated by (11). It will also be obvious that by having the two beams connected as specified the subsoiler can be carried di-

A rod (13) is connected with the portion (4) of the supplemental beam (3) by means of a bolt (14) which passes through one of 60

the alined apertures (8). The upwardly extending beam (6) is also connected to the beam (1) by means of a bolt (15) which passes through one of the alined apertures (7). It will also be ob- 65 vious that an adjustment can also be obtained through the medium of these apertures. The forward end of the rod (13) is enlarged as at (16) and is also provided with an aperture (17). The end ($\bar{1}6$) is se- 70 cured to a doubletree (18) by means of a bolt (19) which is adapted to pass through the aperture (17) and through a double tree (18). It will be obvious that by having the rod (13) connected to the sup- 75 plemental beam (2) considerable of the strain will be removed from the main beam (1) and also that the pull will be direct upon the subsoiler thereby relieving considerable of the strain from the U-shaped 80 clamp (9) of the upwardly extending portion (6) of the supplemental beam.

What I claim as my invention is:

1. In a plow of the class described the combination with a beam of a supplemental 85 beam provided with a main portion terminating in an off-set portion, a substantially U-shaped clamp adapted to straddle said supplemental beam, a link engaging the free ends of said U-shaped clamp and also engaging the first mentioned beam for firmly clamping the two beams together, said beams corrugated upon their adjacent faces, said first mentioned beam adapted to engage said supplemental beam near the junction of the 95 offset portion with the main portion thereof, and means engaging both of said beams for securing the same to a tree.

2. In a device of the class described the combination with a main beam adapted to be 100 secured to a double tree, a supplemental beam provided with a plurality of alined apertures intermediate its ends, said beam provided at its front end with integral upwardly extending portions provided with 105 alined apertures, and means passing through said alined apertures of said upwardly extending portion for securing the same to said main beam, and means adapted to engage the tree and adapted to engage said alined 110 apertures of said supplemental beam for adjustably securing the same thereto.

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3. A device of the class described comprising a main beam, a supplemental beam, provided with alined apertures intermediate the ends thereof, said main beam adapted to be supported by a double tree, a rod, said rod provided with an enlarged apertured end adapted to be secured to said tree, and said rod adapted to engage said alined aper-

tures for adjustably securing the same to said supplemental beam.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

ELMER G. BISHOP.

Witnesses:

C. C. Cook,
Paul O. Gordon.