T. V. HARRIS.

SUBSOILER.

APPLICATION FILED MAY 8, 1916.

1,233,778. Patented July 17, 1917.

Fig. 1

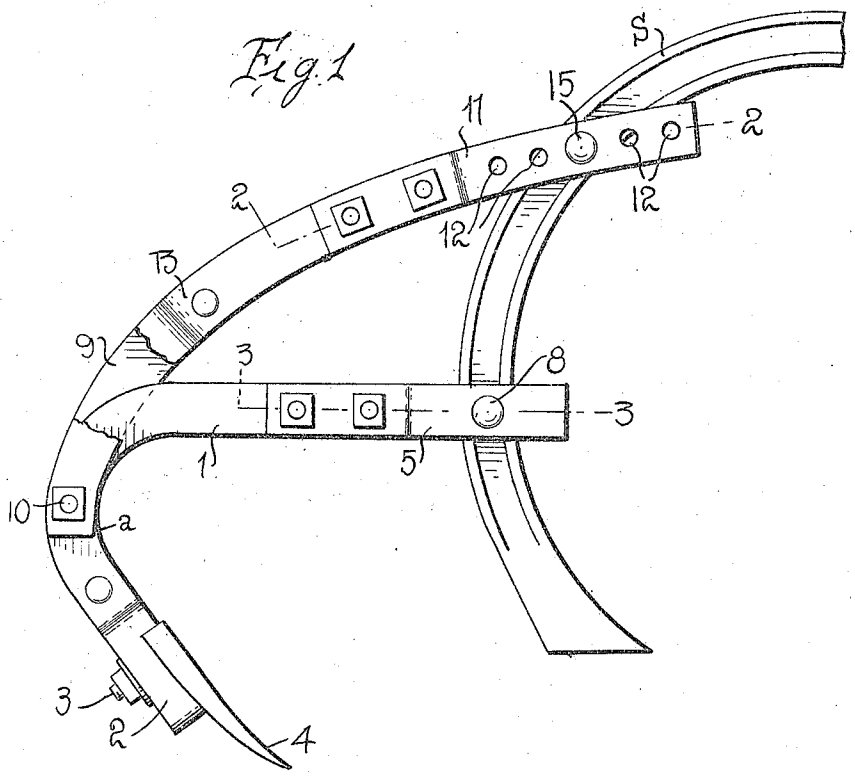


Fig. 2

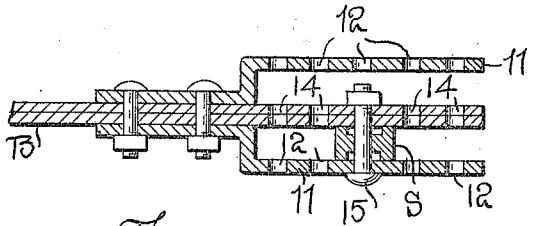


Fig. 4

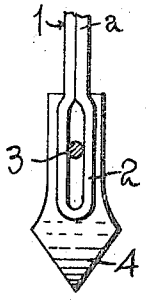
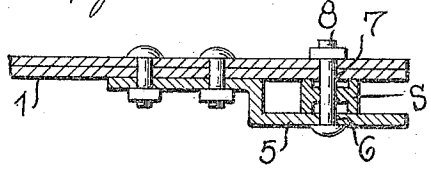


Fig. 3



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SUBSOILER.

1,233,778. Specification of Letters Patent. Patented July 17, 1917.

Application filed May 8, 1916. Serial No. 96,147.

To all whom it may concern:

Be it known that I, TYRE V. HARRIS, a citizen of the United States, residing at Hiddenite, in the county of Alexander and State of North Carolina, have invented certain new and useful Improvements in Subsoilers, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain improvements in subsoilers and it is an object of the invention to provide a novel and improved device of this general character which may be readily and effectively secured to the stock of a turning plow or the like.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved subsoiler whereby certain important advantages are attained and the device is rendered simpler, less expensive and otherwise more convenient and advantageous for use, all as will be hereinafter more fully set forth.

The novel features of the invention will hereinafter be definitely claimed.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein—

Figure 1 is a view in side elevation with a part broken away of a subsoiler constructed in accordance with an embodiment of my invention;

Fig. 2 is a sectional view taken substantially on the line 2—2 of Fig. 1;

Fig. 3 is a sectional view taken substantially on the line 3—3 of Fig. 1; and

Fig. 4 is a view in rear elevation with a part in section illustrating the lower end of the subsoiler and the point coacting therewith.

As disclosed in the accompanying drawings, S denotes the stock of a conventional turning plow to which my improved subsoiler is adapted to be connected.

As herein embodied, my improved subsoiler comprises a goose-neck beam 1 preferably formed of a single strap bent upon itself to afford two thicknesses of material with the bend *a* arranged at the lower end of the stock thereof and separated, as at 2, through which the attaching member 3 of the point 4 is adapted to be directed and whereby said point 4 is capable of adjustment in accordance with the requirements of practice.

Secured to one side of the forward portion of the beam 1 is the bracket 5 provided with an opening 6 in alinement with the opening 7 in the beam 1 and through which the retaining member 8 is adapted to be directed, said member 8 being also suitably disposed through the stock S.

B denotes a supporting beam preferably formed of two imposed straps with their adjacent lower ends separated to afford a fork 9 adapted to receive the curved portion of the beam 1, and said curved portion adjacent its lower end is pivotally engaged with the beam B as indicated at 10, as is believed to be clearly disclosed in the accompanying drawings.

Suitably secured to opposite sides of the beam B adjacent its upper or forward end are the brackets 11 provided with the openings 12 in alinement with the openings 14 produced in the beam B and through which are adapted to be disposed the retaining bolt 15 which is also directed through the stock S. It is to be understood that the bolt 15 is adapted to coact with only one of the brackets 11 and that the extent of penetration of the point 4 may be further controlled by the adjustment afforded by the openings 12 and 14 which are spaced longitudinally of the brackets 11 and the beam B respectively. By having the brackets at opposite sides of the beam B, it will be perceived that said beam may be disposed to either side of the stock S as the requirements of practice may demand.

From the foregoing description, it is thought to be obvious that a subsoiler constructed in accordance with my invention is of an extremely simple and comparatively inexpensive nature and is particularly well adapted for use by reason of the convenience and facility with which it may be assembled, and it will also be obvious that my invention is susceptible of some change and modification without material departure from the principles and spirit thereof and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice.

I claim:

In combination with a plow stock, a sub-

soiler comprising a goose-neck beam, a bracket carried by the forward end portion of the beam, said bracket being disposed between the beam and the bracket, a bolt extending through the bracket, stock and beam whereby the beam may be pivotally secured to the stock, a supporting beam having its lower end portion forked to straddle the goose-neck beam and pivotally engaged with said goose-neck beam at the lower part of the curved portion thereof, the opposite end portion of the supporting beam being provided with brackets having portions in spaced relation to the beam and disposed longitudinally thereof, said brackets and the adjacent portions of the beam being provided with a series of longitudinally spaced openings, and a removable bolt adapted to be directed through the stock and registering openings in the beam and a bracket whereby the beam may be secured to the stock at a point above the connection between the goose-neck beam and the stock, said longitudinally spaced openings in the beam and brackets permitting a longitudinal adjustment of the supporting beam.

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

TYRE V. HARRIS.

Witnesses:
J. B. LEACH,
C. D. HARRIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."