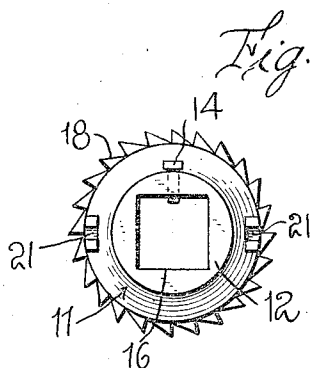
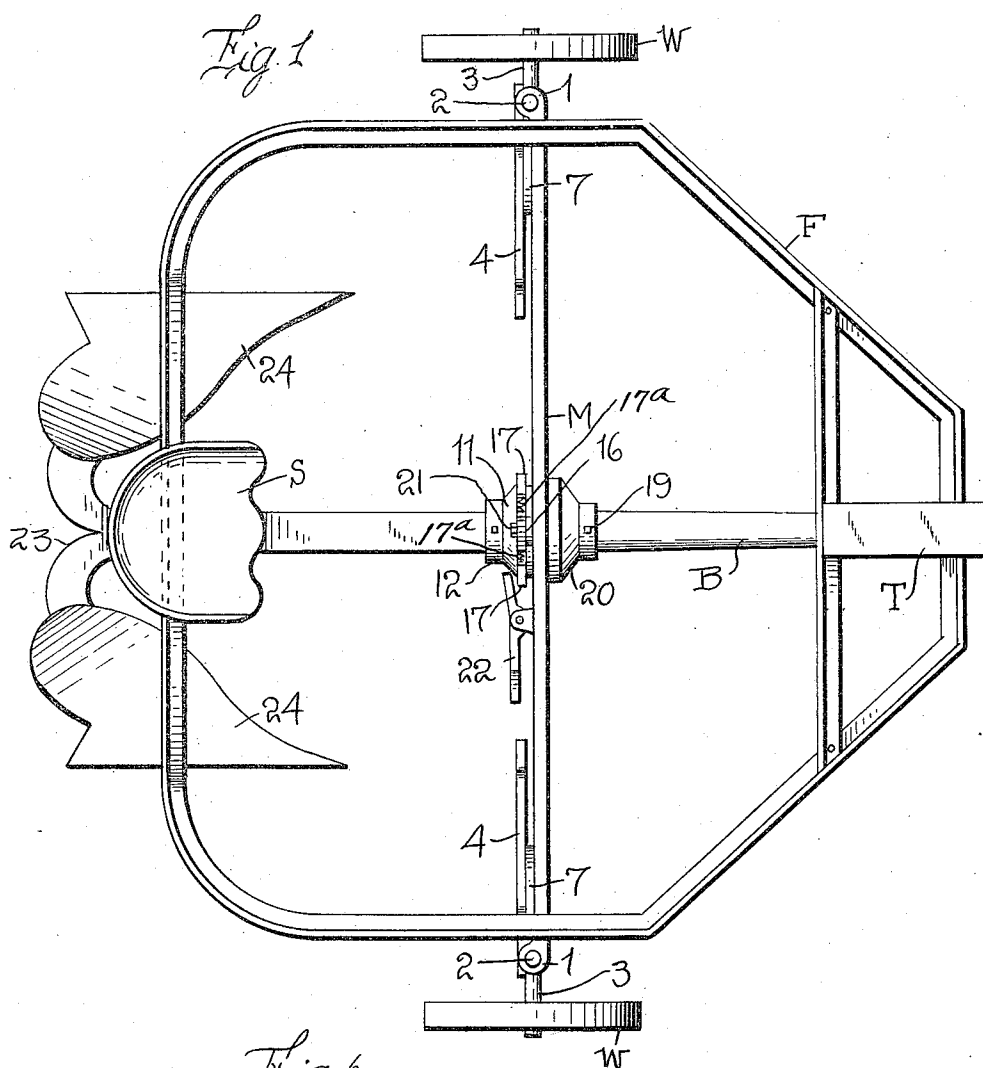


FLOW.

Patented Oct. 16, 1917.

2 SHEETS—SHEET 1.

1,243,072.



Inventor

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C. R. JURAN.

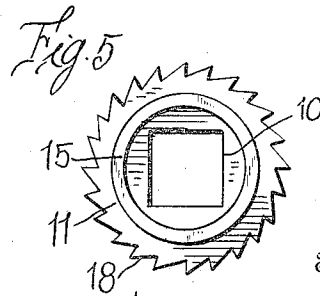
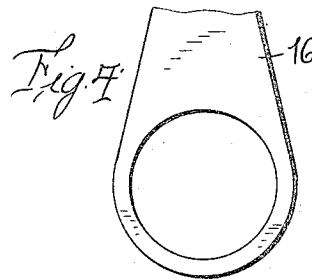
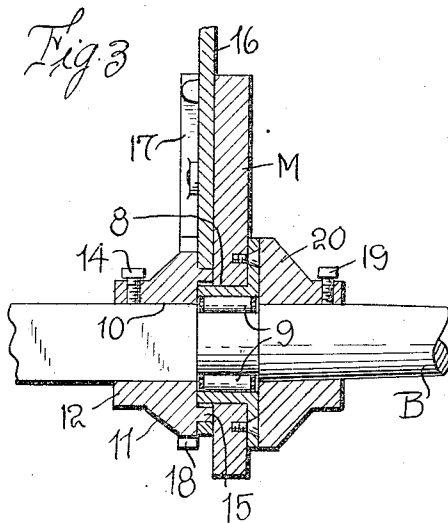
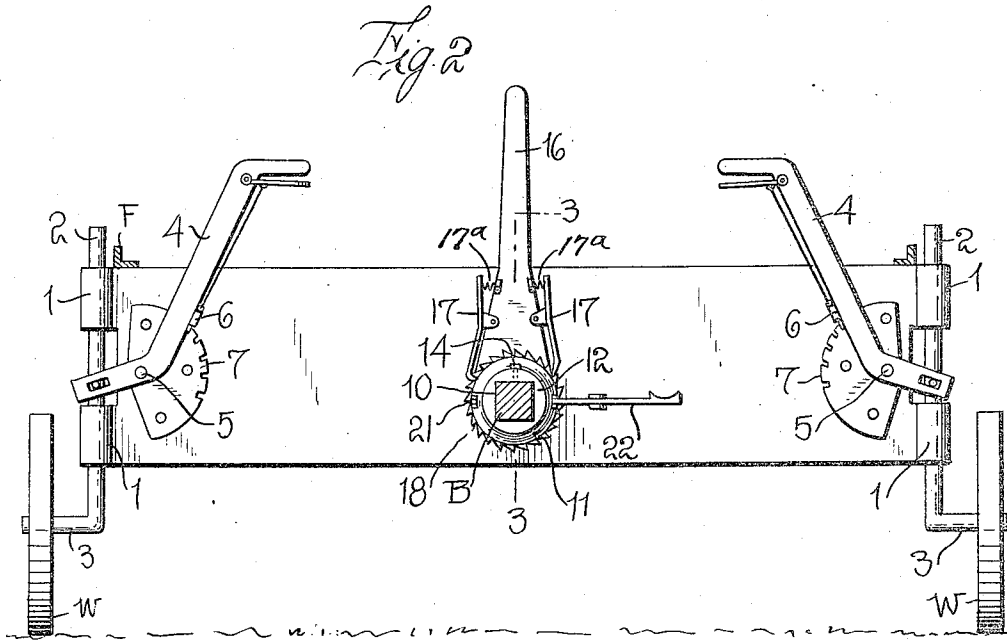
PLOW. •

APPLICATION FILED APR. 14, 1917.

1,243,072.

Patented Oct. 16, 1917.

2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

CHARLES R. JURAN, OF HERRICK, SOUTH DAKOTA.

PLOW.

1,243,072.

Specification of Letters Patent.

Patented Oct. 16, 1917.

Application filed April 14, 1917. Serial No. 162,135.

To all whom it may concern:

Be it known that I, CHARLES R. JURAN, a citizen of the United States, residing at Herrick, in the county of Gregory and State of South Dakota, have invented certain new and useful Improvements in Plows, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain improvements in plows and has relation more particularly to a device of this general character of a reversible type; and it is an object of the invention to provide a device of this general character with novel and improved means whereby the same may be reversed.

It is also an object of the invention to provide a device of this general character which is wheel-supported together with means whereby the same may be employed with convenience and facility along a hillside.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved plow 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 top plan of a plow constructed in accordance with an embodiment of my invention;

Fig. 2 is a transverse vertical sectional view taken through the device as herein embodied with the supporting wheel shown in elevation;

Fig. 3 is an enlarged sectional view taken substantially on the line 3—3 of Fig. 2;

Fig. 4 is an enlarged fragmentary view in elevation of the pivoted end portion of the turning lever as herein included;

Fig. 5 is a view in elevation of the ratchet wheel as herein embodied; and

Fig. 6 is a view in elevation of the ratchet wheel opposite to that shown in Fig. 5.

As disclosed in the accompanying drawings, F denotes a frame of any ordinary or preferred construction and configuration

and which includes the seat structure S, the draft tongue T and the cross member M.

Each of the ends of the cross member M is provided with the vertically disposed guides 1 through which is loosely directed the vertical extension 2 of an axle terminating at its lower end with an outwardly directed spindle 3 upon which a supporting wheel W is adapted to be mounted. Operatively engaged with the extension 2 preferably at a point intermediate the guides 1 is a lever 4 pivotally engaged, as at 5, with the member M and provided with a latch mechanism 6 adapted to coact with the rack 7. It is thought to be self-evident that by proper rocking the lever 4 endwise movement is imparted to the extension 2 so that the wheel W may be readily and conveniently adjusted relative to the frame F and which adjustment is of particular advantage when it is desired to employ my improved plow along a hillside.

The member M is provided with an opening 8 in which are positioned the anti-friction members 9, preferably roller bearings.

B denotes a beam having its free end portion rounded and disposed through the opening 8 and adapted to engage the anti-friction members 9 so that said beam B may be rotated with a minimum of frictional resistance. The portion of the beam B rearwardly of the member M is angular in cross section and directed through an opening 10 also angular in cross section produced at the axial center of the wheel 11. The wheel 11 is provided with a hub 12 through which is disposed a set screw 14 whereby the wheel 11 may be held against movement longitudinally of the beam B.

The inner face of the wheel 11 is provided with an annular flange 15 of a major diameter less than the corresponding diameter of the wheel 11. The flange 15 extends toward the member M and is in contact therewith.

The annular flange 15 serves as a fulcrum for the lever 16. The opposite sides of the lever 16 are provided with the pawls or dogs 17, the spring 17^a co-acting with the pawls or dogs 17 to cause the same to normally engage the ratchet teeth 18 disposed circumferentially around the wheel 11 whereby it will be perceived that the lever 16 may be operated to impart rotary movement to the beam B.

Clamped to the beam B through the me-

dium of the set screw 19 and forwardly of the member M but in contact therewith is the collar 20 which serves to hold the beam B against rearward longitudinal movement.

5 At diametrically opposed points the wheel 11 is provided in its outer face with the notches 21 with which is adapted to coact the holding lever 22 pivotally supported intermediate its length by the member M and
10 which is adapted, preferably, to be operated by the foot of the person occupying the seat structure S. The holding lever 22 serves to prevent rotation of the beam B under normal conditions.

15 The rear end portion of the beam B is provided with the oppositely directed standards 23 to the outer or free ends of which are secured the plows 24 one of said plows being left hand and the second plow right
20 hand for a purpose which is believed to be clearly apparent to those skilled in the art to which my invention appertains.

It is also to be noted that the forward portion of the beam B is tapered in advance
25 of the portion coacting with the anti-friction members 9 in order to facilitate the application of the wheel 11 and the collar 20.

From the foregoing description, it is
30 thought to be obvious that a plow 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 several parts herein shown in carrying out my invention in practice, except as hereinafter claimed.

I claim:

A device of the character described including a portable frame provided with a cross member, said cross member having an opening, a plow beam disposed through said opening and adapted to rotate, an end portion of the beam being provided with oppositely directed standards, plows secured to the outer ends of said standards, a ratchet wheel fixed to the beam, a lever pivotally supported by the ratchet wheel and provided with dogs coacting with said wheel whereby said beam may be rotated, and means independent of the lever coacting with the ratchet wheel for holding the beam against rotation.

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

CHARLES R. JURAN.

Witnesses:

CHAS. CASPARY,

CHAS. SCHRAMM.

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