

918,002.

C. D. BUTCHART.
HEAD GATE LOCKING DEVICE.
APPLICATION FILED NOV. 3, 1908.

Patented Apr. 13, 1909.

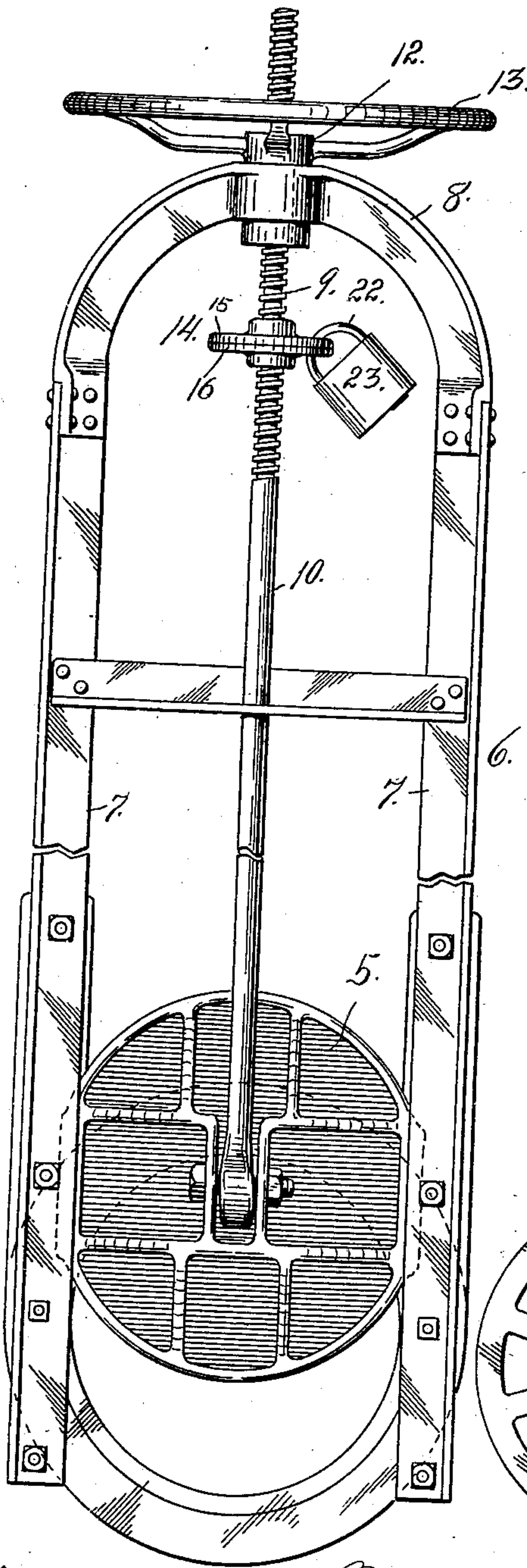


Fig. 1

Witnesses
Otto E. Hoddick.
A. Elert O'Brien

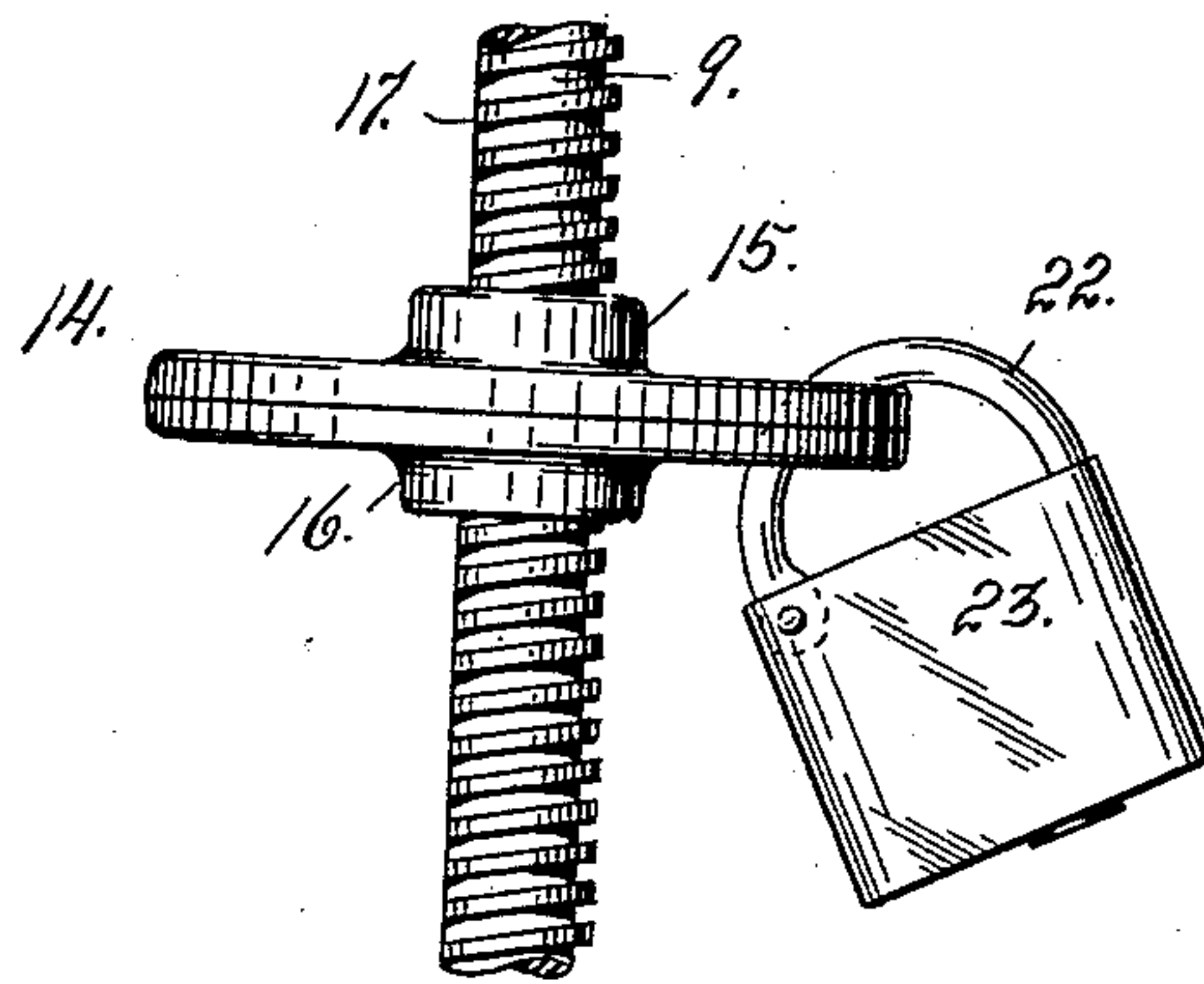


Fig. 2

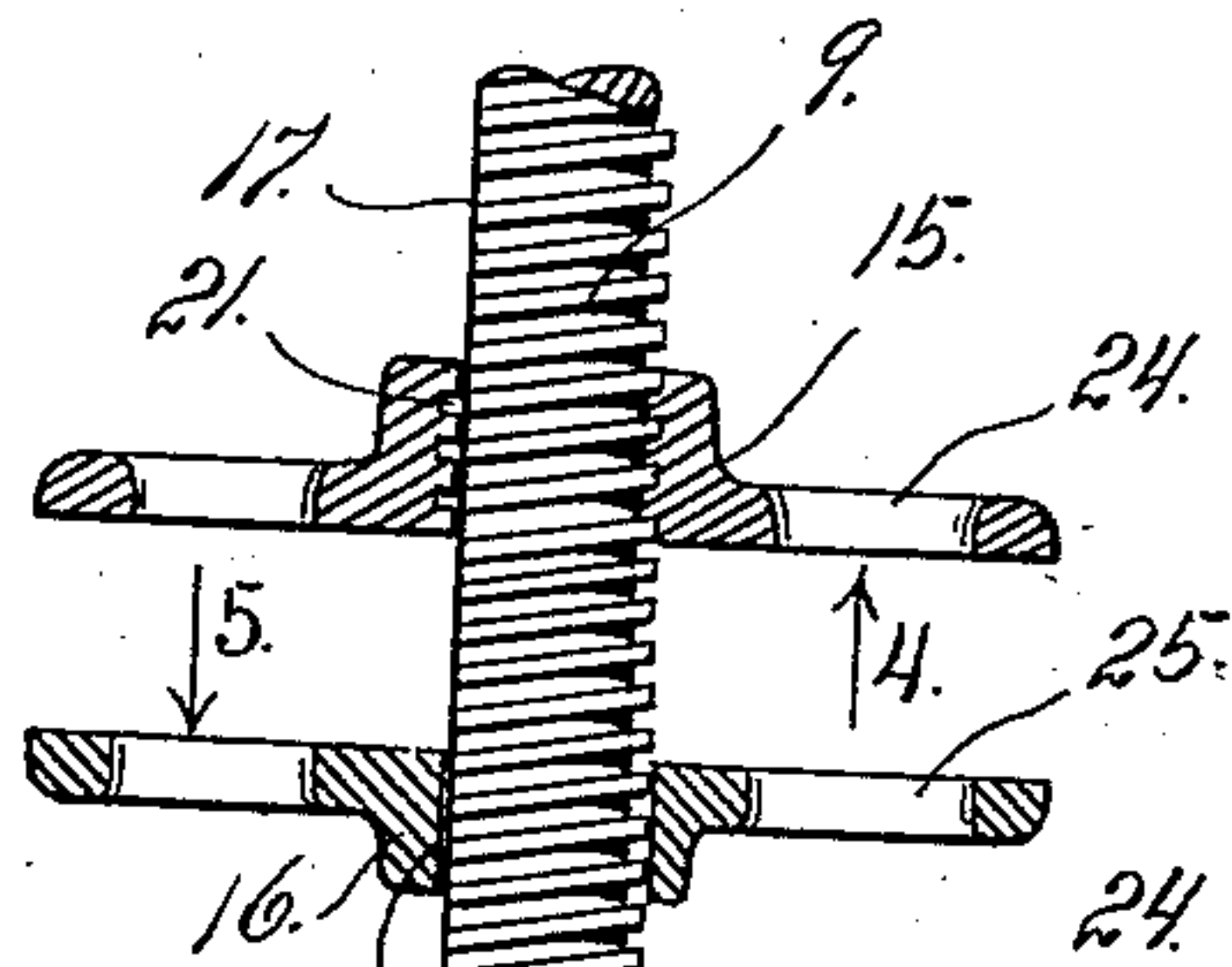


Fig. 3

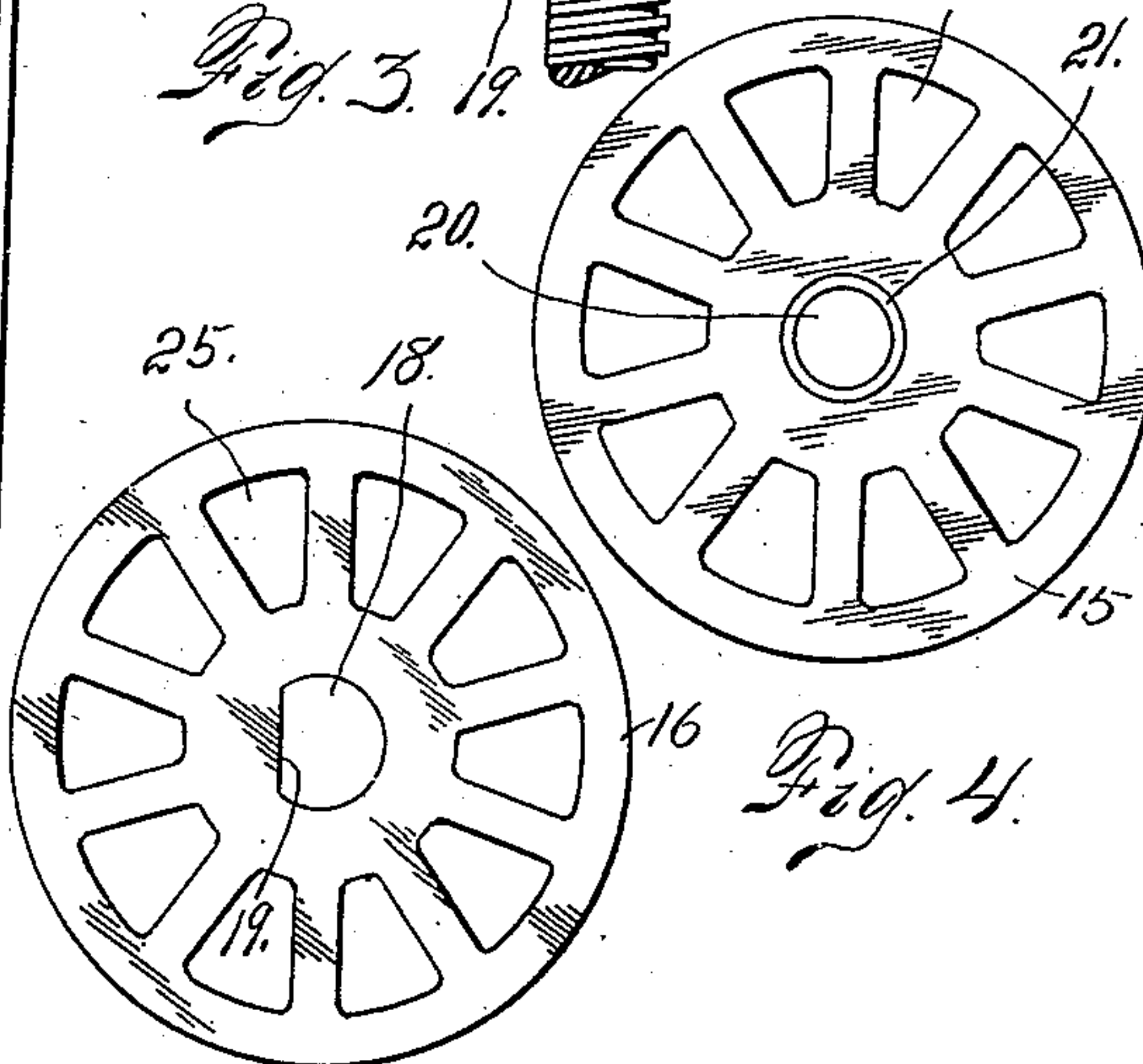


Fig. 4

Fig. 5

Inventor
C. D. Butchart.
By A. J. O'Brien
Attorney

UNITED STATES PATENT OFFICE.

CLARENCE D. BUTCHART, OF DENVER, COLORADO.

HEAD-GATE-LOCKING DEVICE.

No. 918,002.

Specification of Letters Patent.

Patented April 13, 1909.

Application filed November 3, 1908. Serial No. 460,906.

To all whom it may concern:

Be it known that I, CLARENCE D. BUTCHART, a citizen of the United States, residing in the city and county of Denver and State of Colorado, have invented certain new and useful Improvements in Head - Gate - Locking Devices; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in head gate locking devices, my object being to provide adjustable means for limiting the opening movement of the head gate, said means being of such construction that it becomes impossible for an unauthorized person to open the gate beyond a predetermined limit which is fixed by the adjustment of the locking device upon the rod or screw-stem of the gate.

The invention will now be described in detail, reference being made to the accompanying drawing in which,

Figure 1 is a front view of an irrigating head-gate equipped with my improvements. Fig. 2 is a detail view showing the locking device mounted upon the threaded portion of the stem of the gate, the device being shown in the locked position and on a larger scale. Fig. 3 is a similar view showing the parts of the locking devices separated. Figs. 4 and 5 are plan views in detail and on a larger scale, respectively illustrating the two members of the locking devices.

The same reference characters indicate the same parts in all the views.

Let the numeral 5 designate the head gate and 6 the frame having parallel side bars 7 and a connecting arch 8 at the top through which passes the threaded portion 9 of the stem 10 of the gate. This screw stem passes through a plain or unthreaded opening in the top of the frame. To the portion of this threaded stem which extends above the frame is applied a nut 12 with which is connected a hand wheel 13 to facilitate the turning of the nut. Upon the screw-stem below the top of the frame is mounted the locking devices 14 composed of two members 15 and 16. The threaded part 9 of the stem is flattened on one side as shown at 17. The member 16 of the locking device has an unthread-

ed opening 18 which is straight on one side as shown at 19 to fit the flat side of the screw-stem. The opening 18 is plain or unthreaded whereby the said member is vertically slidable upon the stem but cannot rotate thereon, by reason of the straight side. The member 15 is provided with a circular opening 20 and is threaded as shown at 21 to engage the threads of the screw-stem. Hence this member is arranged to travel longitudinally of the stem either up or down according to the direction of rotation.

Where head gates of this character are employed it is important that water consumers shall be allowed to use a predetermined amount of water and no more. The overseer of the ditch first determines the maximum extent to which the gate must be opened in order to allow the predetermined number of inches of water to pass through. He then adjusts the member 15 upon the screw-stem of the gate so that when the gate is raised to allow the said amount of water to pass through, the member 15 will engage the top of the head gate frame and prevent the further opening of the gate. The locking member 16 is then brought into engagement with the member 15 (see Figs. 1 and 2) and the hasp 22 of a padlock 23 passed through two of the registering openings 24 and 25 with which the locking members are provided. The hasp is then passed into the lock and cannot be removed from the locking device except by the overseer of the ditch or canal who is the only person having a key to the lock.

It will thus be observed that my improvement affords an exceedingly simple and cheap device for performing the aforesaid function. It is also readily adjustable.

Having thus described my invention what I claim is:

1. A head gate locking device comprising in combination with the screw stem of the head gate, two members, one of which is threaded to travel on the said stem while the other is slidable thereon but fixed against rotation thereon, and means for connecting the two members to limit the opening movement of the gate, substantially as described.

2. The combination with the screw-threaded stem of a head gate, of a locking device composed of two members one being freely slidable upon the threaded portion of the stem, the stem and member being shaped to prevent the latter from rotary

movement thereon, the other member being threaded on the stem and vertically adjustable thereon, the two members being provided with openings which may be made to register, and a lock whose hasp is adapted to pass through the openings of the two members, for the purpose set forth.

3. The combination with the screw-threaded stem of a head gate, of a locking device mounted thereon and composed of two members, the threaded member of the stem being flattened on one side, one of the

members having an opening shaped to fit the stem and slidable freely thereon, the other member being threaded on the stem, and means for locking the two members together to prevent rotary movement on the stem, substantially as described.

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

CLARENCE D. BUTCHART.

Witnesses:

OTTO E. HODDICK,
A. EBERT O'BRIEN.