

No. 791,637.

PATENTED JUNE 6, 1905.

H. D. MERRILL.

FLOOD GATE.

APPLICATION FILED SEPT. 26, 1904.

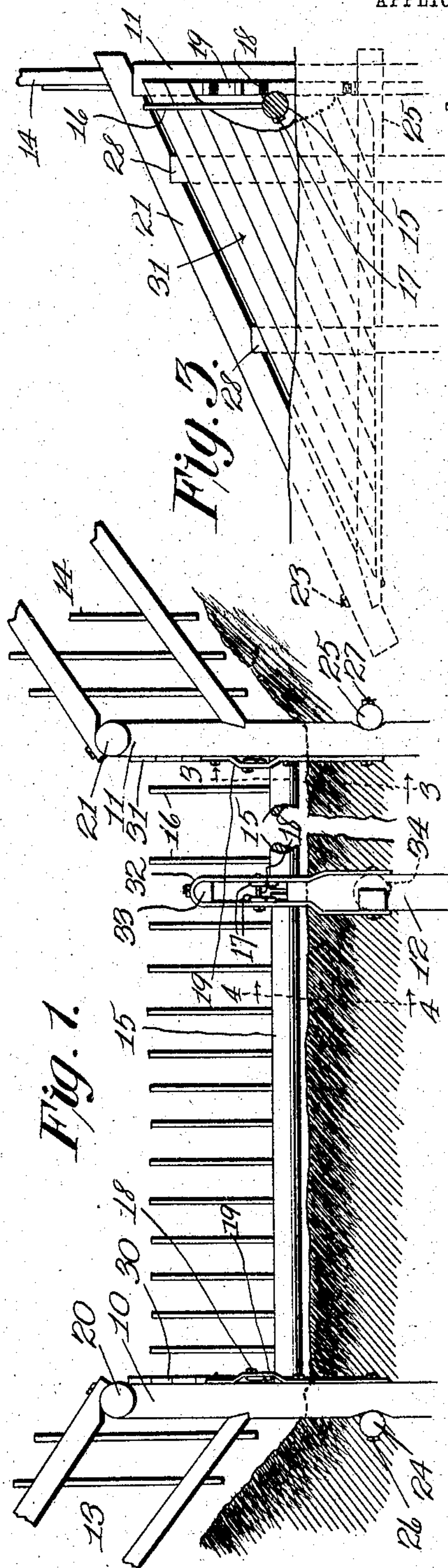


Fig. 1.

Witnesses

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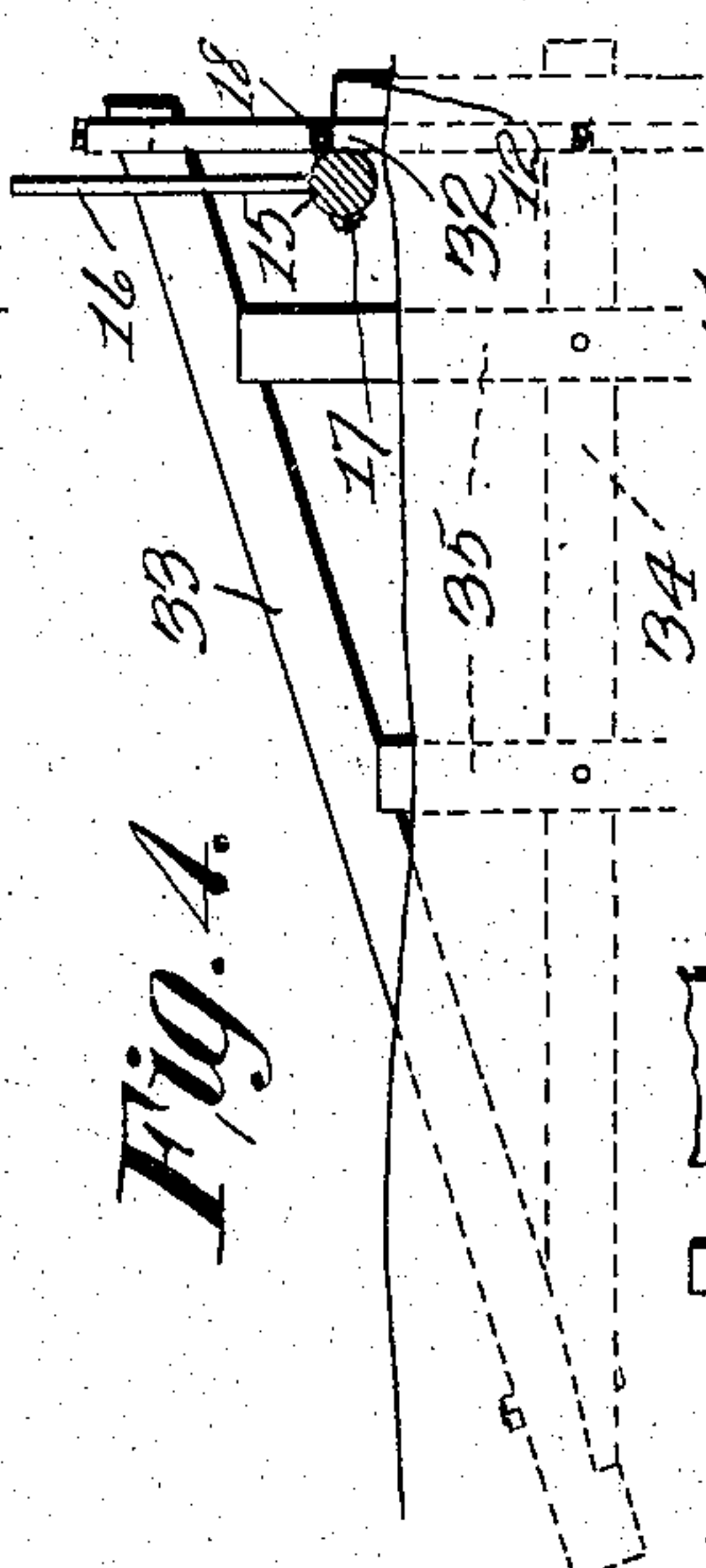


Fig. 4.

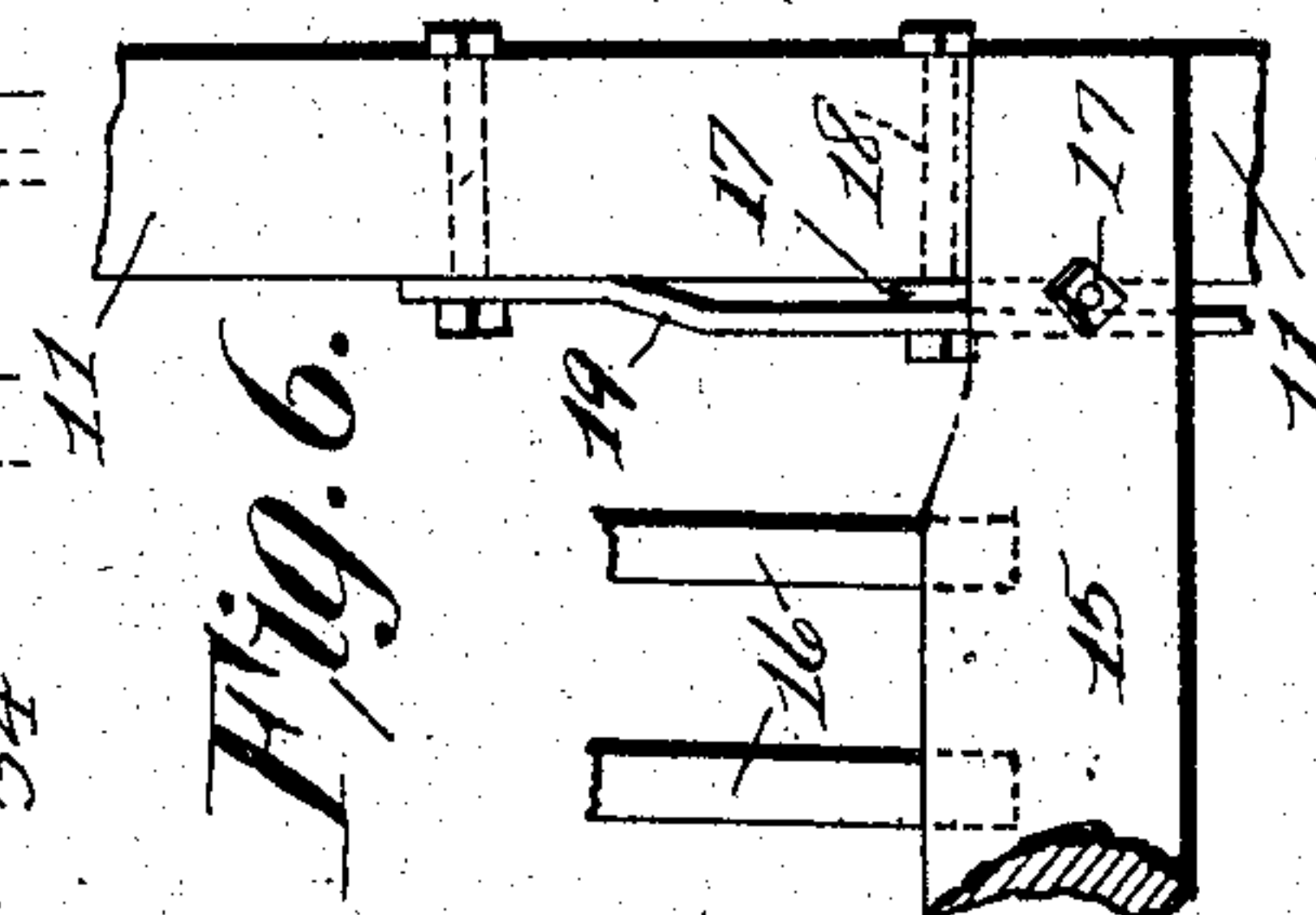


Fig. 6.

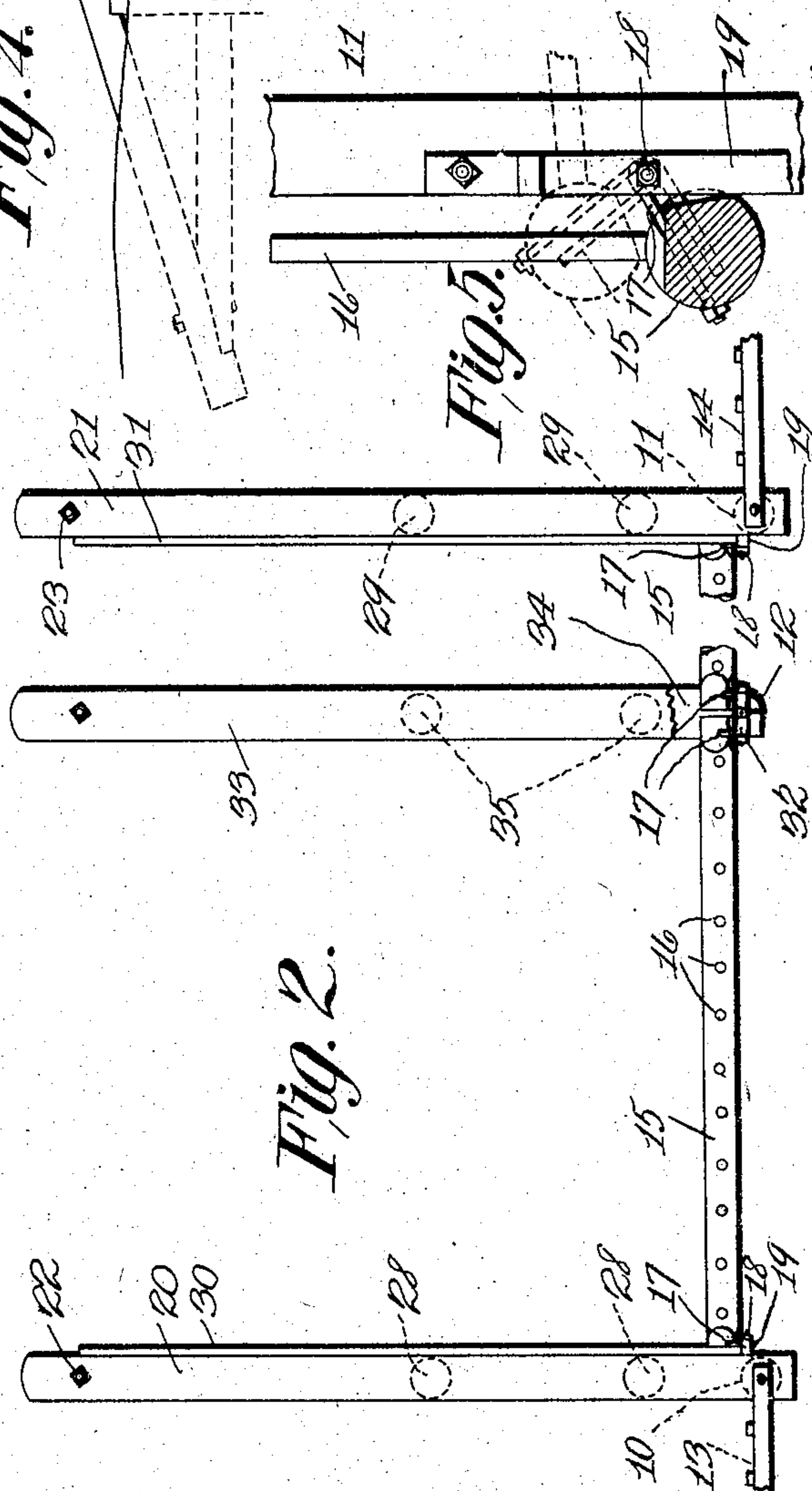


Fig. 2.

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# UNITED STATES PATENT OFFICE.

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## FLOOD-GATE.

SPECIFICATION forming part of Letters Patent No. 791,637, dated June 6, 1905.

Application filed September 26, 1904. Serial No. 226,066.

*To all whom it may concern:*

Be it known that I, HENRY DEARBORN MERRILL, a citizen of the United States, residing at Laddonia, in the county of Audrain and State of Missouri, have invented a new and useful Flood-Gate, of which the following is a specification.

This invention relates to automatic flood fences or gates for use across streams and low places liable to be flooded in certain seasons of the year, which will effectually prevent the passage of stock during the dry season, but which will yield and permit the passage of drift material during high water or floods without damage and be restored to its former position when the flood has passed.

The invention has for its object to improve and strengthen the construction of devices of this character.

With these and other objects in view, which will appear as the nature of the invention is better understood, the same consists in certain novel features of construction, as hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which corresponding parts are denoted by like designating characters, is illustrated the preferred form of embodiment of the invention capable of carrying the same into practical operation, it being understood that the invention is not necessarily limited thereto, as various changes in the shape, proportions, and general assemblage of the parts may be resorted to without departing from the principle of the invention or sacrificing any of its advantages.

In the drawings thus employed, Figure 1 is an elevation of the improved device from the downstream side. Fig. 2 is a plan view of the same. Fig. 3 is a section on the line 3 3 of Fig. 1. Fig. 4 is a section on the line 4 4 of Fig. 1. Figs. 5 and 6 are enlarged detail views of the hinge portion of the device.

The improved device comprises two posts 10 11, located at the sides of the channel or the low locality where the greatest current will occur during the times of floods and may be any distance apart, according to the nature of the ground. Where the stream or low land is relatively contracted, one of the gates

only will generally be required; but for wider streams or lands two or more of the gates may be employed and arranged to operate independently. For the purpose of illustration two of the gates are shown, with an intermediate supporting-post 12. The ordinary fences 13 14, of any approved construction, will lead from the boundary-posts 10 11.

The automatic gate or fence portion of the device consists of the head member 15, having spaced pickets 16 and provided at the ends with U-shaped loop-bolts 17, connected to the inner faces of the posts 10 11 and both sides of the intermediate post 12 by bolts 18. The ends of the head members 15 extend past the upstream sides of the posts and are preferably squared where they engage the posts and hang from their pivot-bolts at an angle, as shown more clearly in Fig. 5, and thus support the pickets 16 normally in a vertical position. The outer ends of the pivot-bolts 18 are supported by guard-straps 19, bolted to the posts above and below the bolts and providing a strong and durable support to the pivot-bolts.

The posts 10 11 are supported by inclined braces 20 21, connected at the outer ends, as at 22 23, to mudsills 24 25, which are in turn connected at 26 27 to the posts 10 11. The members 20 21 are connected with the mudsills 24 25 by spaced vertical stay members 28 and 29 and the frames formed by the braces and mudsills covered by planking 30 31 to form a water-shedding surface and preventing damage to the banks by drift material and ice.

The intermediate post 12 is provided with a U-shaped strap 32, extending above the same and between whose sides the central pivot-bolt 18 is connected, the strap thus performing substantially the same function as the guard-straps 19 and being, in fact, a modified form of the same. The U-shaped strap 32 also serves as a support for one end of an inclined combined ice-breaker and post-supporter 33, the member 33 being supported and strengthened by a mudsill 34 and vertical stay members 35 in substantially the same manner as the members 20 21 are strengthened and supported.

The construction is very strong and durable



and may be firmly anchored in any approved manner, according to the condition of the ground.

When an earth bottom is encountered, the posts and mudsills will be embedded in the soil; but when a rocky locality is encountered then the device will be suitably anchored with iron rods, secured by drilling into the rock in the usual manner.

10 The U-shaped straps may also be employed upon the end posts if required.

Having thus described the invention, what is claimed is—

1. In a flood-gate, spaced supporting-posts  
15 at the sides of the gateway-opening and one or more intermediate supporting-posts, U-shaped keeper-straps connected to said intermediate posts and provided with transverse pins, gates formed of head members and spaced pickets  
20 with the adjacent ends of the head members provided with elongated eyes for movably engaging said pins between the sides of said U-shaped strap, and a guard member connected to each of said straps at the upper terminal of the same and extending at an incline

therefrom and secured to the bed of the stream at the upstream side of the gate.

2. In a flood-gate, spaced supporting-posts at the sides of the gateway-opening and one or more intermediate supporting-posts, keeper-  
30 straps on the inner sides of the end posts and upon both sides of the intermediate posts and spaced therefrom and provided with transverse pins, and gates formed of head members and spaced pickets and provided with  
35 elongated eyes movably engaging said pins.

3. In a flood-gate, a supporting-post having an inverted-U-shaped strap attached to its sides and provided with a transverse pin, in combination with a gate formed of a head mem-  
40 ber having spaced pickets and provided with elongated eyes for movably engaging said transverse pin.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in  
45 the presence of two witnesses.

HENRY DEARBORN MERRILL.

Witnesses:

W. H. LOGAN,

W. B. LEWELLEN.