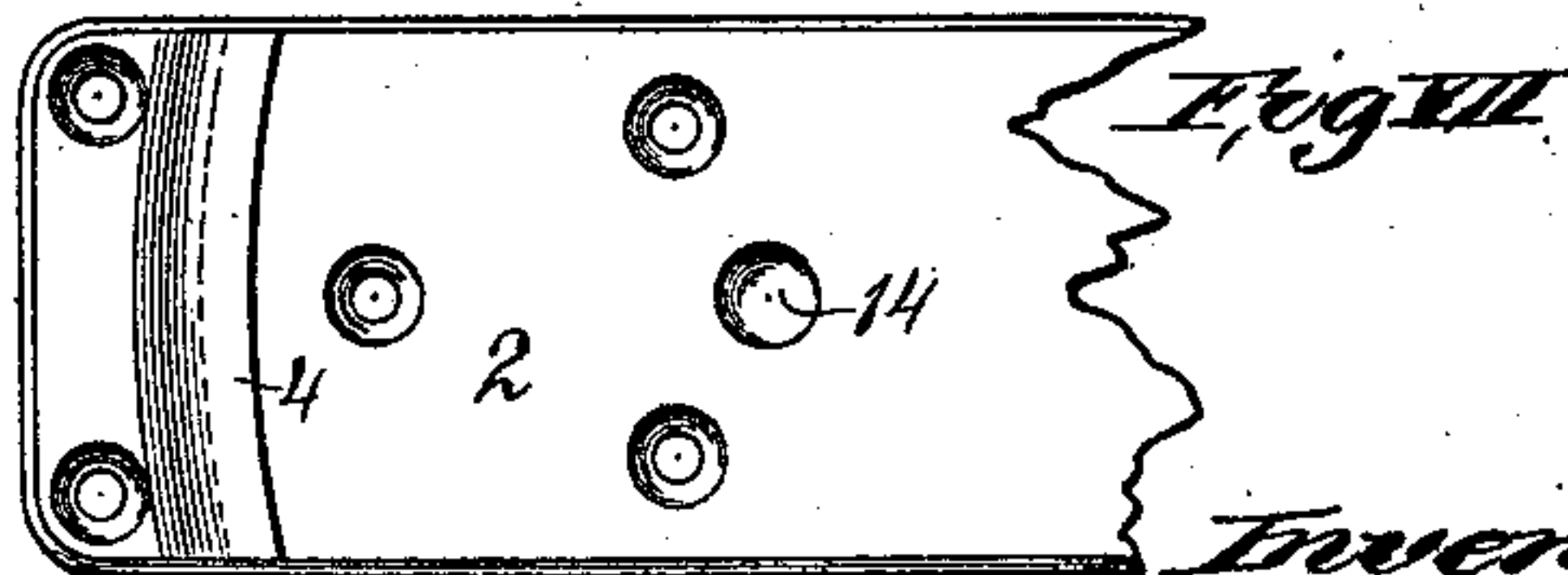
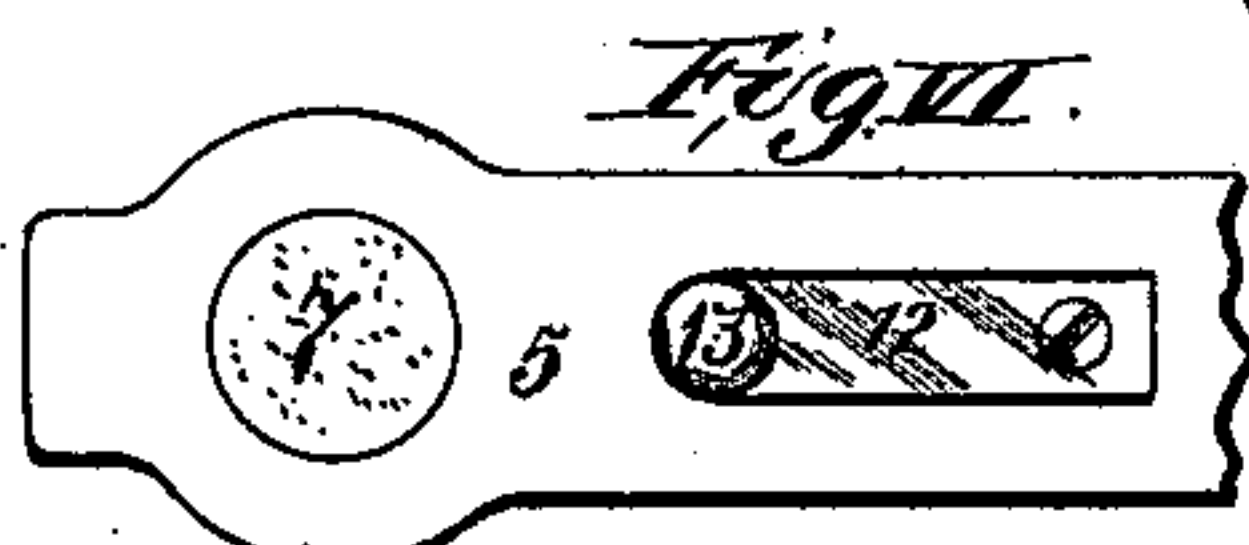
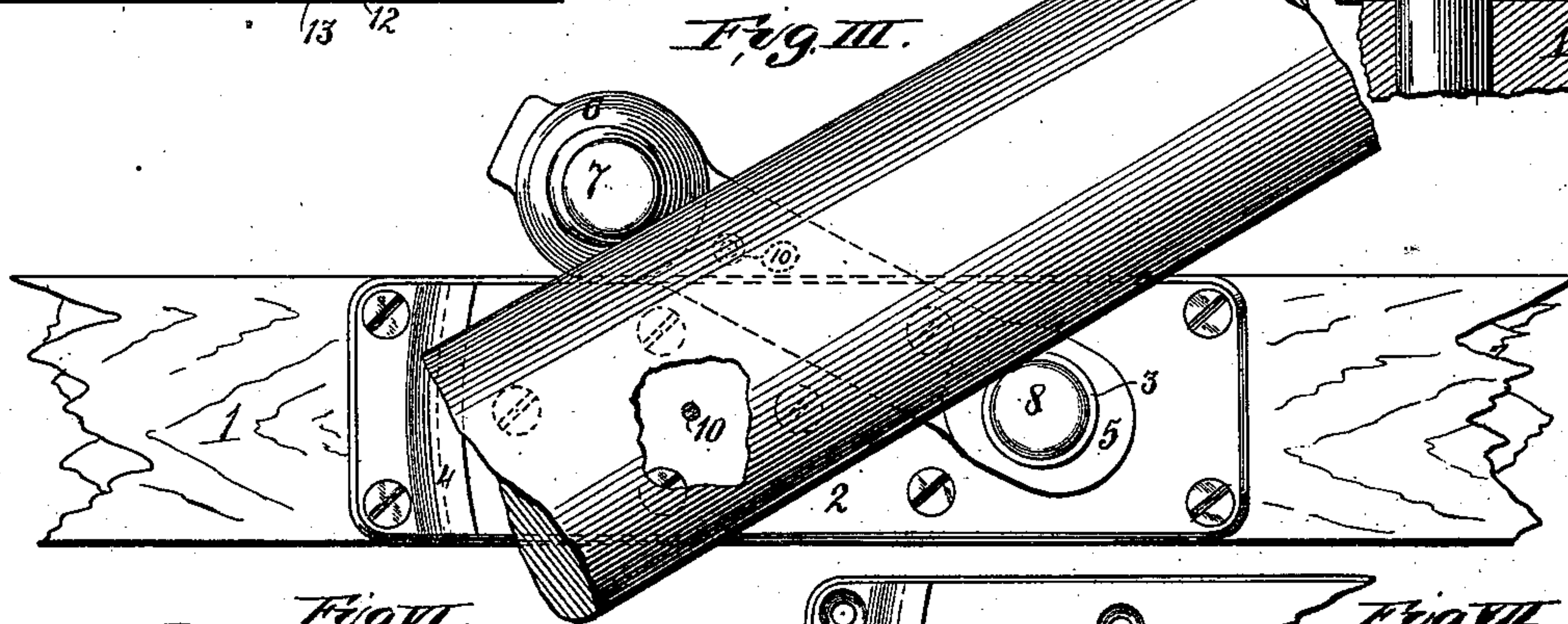
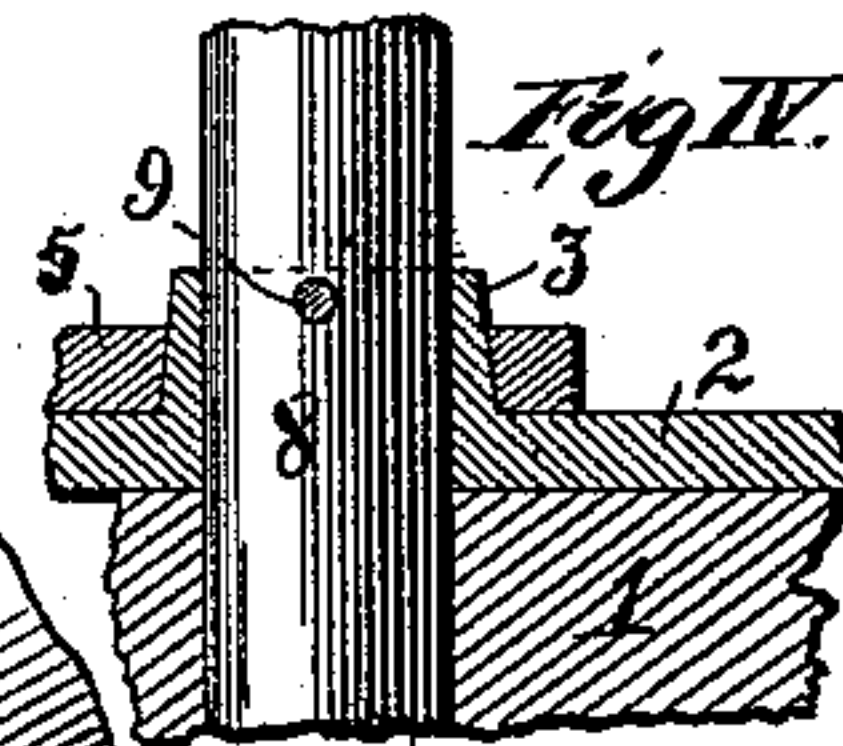
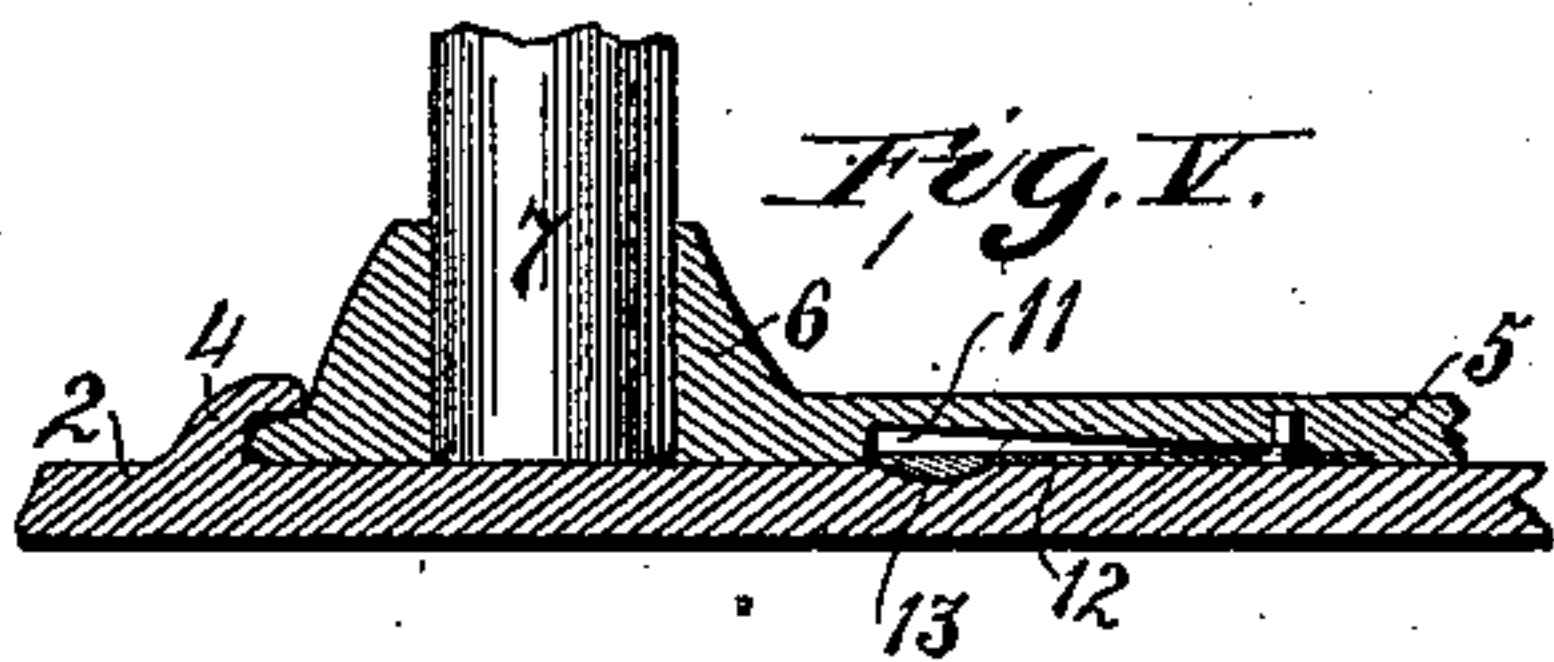
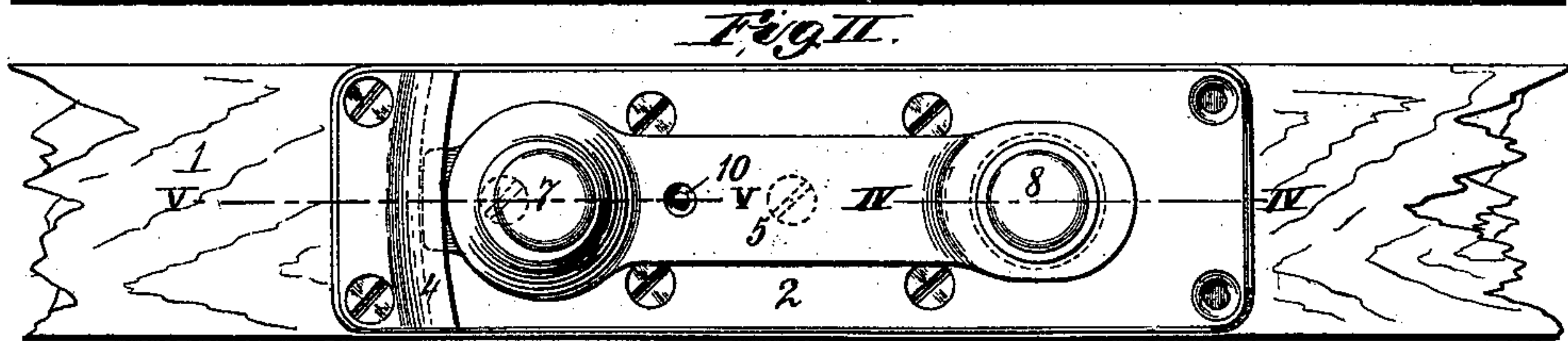
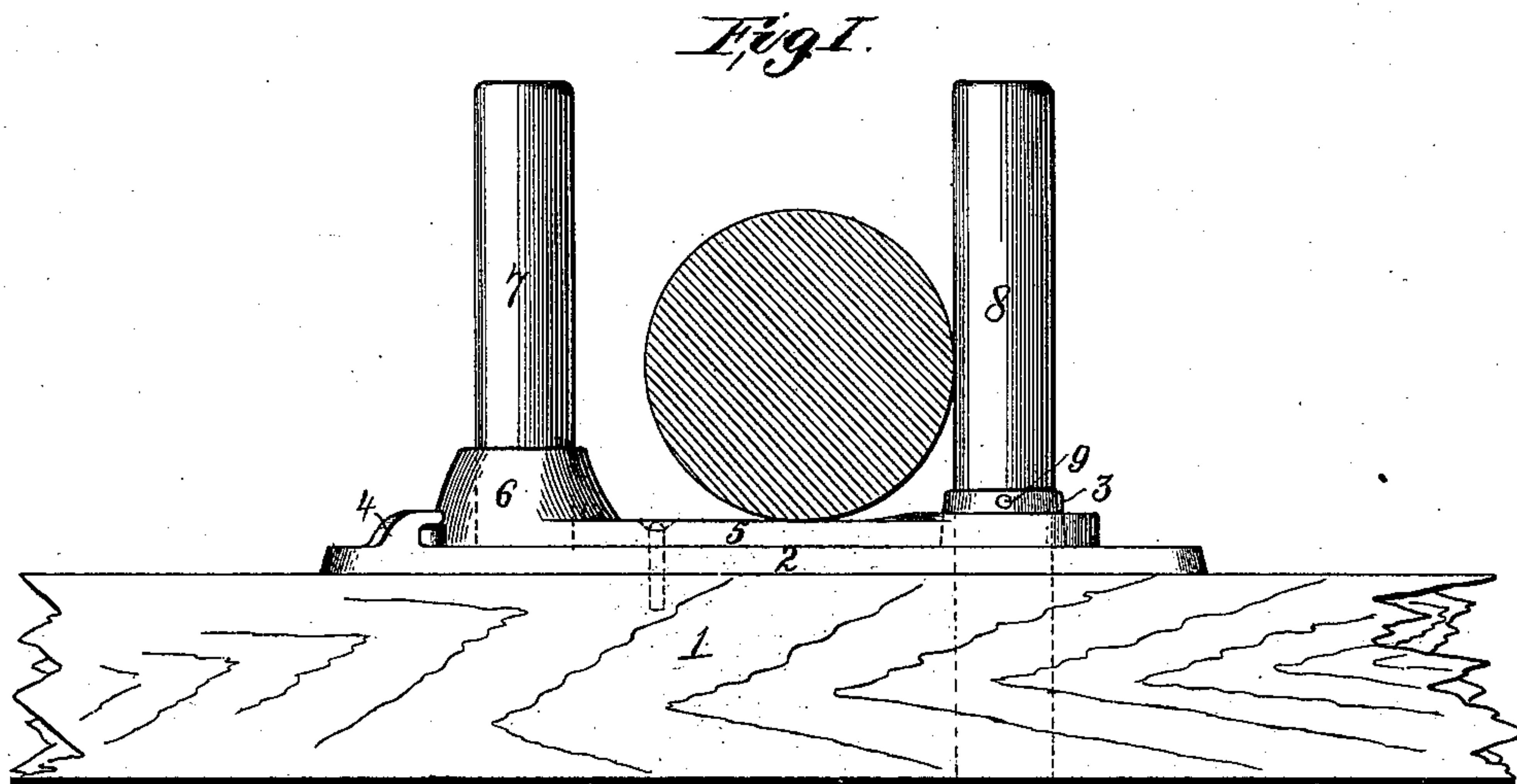


(No Model.)

H. W. STONE.  
THOLE PIN ROWLOCK.

No. 532,714.

Patented Jan. 15, 1895.



*Attest:*  
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# UNITED STATES PATENT OFFICE.

HENRY W. STONE, OF ST. LOUIS, MISSOURI, ASSIGNOR, BY MESNE ASSIGNMENTS, OF ONE-THIRD TO FRED B. STACEY, OF LE CLAIRE, IOWA.

## THOLE-PIN ROWLOCK.

SPECIFICATION forming part of Letters Patent No. 532,714, dated January 15, 1895.

Application filed May 14, 1894. Serial No. 511,111. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY W. STONE, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Thole-Pin Rowlocks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

10 This invention relates to improvements in thole-pin row locks, and has for its object to provide an implement of exceeding simplicity of construction combined with great strength and ease of application to the gunwale of the boat, and is of very economic construction.

15 My invention consists in features of novelty hereinafter fully described and pointed out in the claims.

20 Figure I is a side view. Fig. II is a top view. Fig. III is a top view, showing the parts in the position they assume when the oar has struck a sufficient obstruction to break the fastening of the swivel plate. Fig. IV is a vertical section on line IV—IV of Fig. II. 25 Fig. V is a vertical section on line V—V, of Fig. II. Fig. VI is a bottom view of the swivel plate; and Fig. VII is a top view of the gunwale plate.

30 Referring to the drawings:—1 represents the gunwale of the boat, which is ordinarily made flat on top, and to which is secured the cast metal plate 2. This plate is about the width of the gunwale, and is provided with a collar 3, near its forward end. Toward 35 the rear end there is a flange lip 4. Around the collar 3, and extending down under the flanged lip 4 extends the swivel plate 5, provided with a shoulder 6, which supports the pin 7. This pin is supported in the shoulder 40 by being driven into a hole bored vertically through the shoulder 6, the pin being made fast in the shoulder. Through the collar 3 there is a vertical hole, and the pin 8, which is the bearing pin for the oar, extends through 45 this collar, and into the gunwale 1. A small pin or rivet 9 secures the bearing pin 8 in position. From this it will be seen that the pin 8, which is the forward one of the two, is

stationary. The pin 7 being secured in the swivel plate 5 may swing around, the collar 50 3 forming an axis for such movement. The flanged lip 4 prevents the pin 7, or the flanged plate 5 from rising while the two pins are in a position over the gunwale of the boat. To secure the two pins in this position, a small 55 hole 10 is bored through the swivel plate 5, and the gunwale plate 2, and into this hole a wire or nail can be inserted, and will keep the two pins in their alignment along the gunwale; or in place of the hole 10, there may be 60 a small groove hollowed out of the bottom of the plate 5, as indicated in Fig. V of the drawings. This groove is to be provided with a flat spring 12 riveted into the plate 5, and having at its outer end a small knob 13, which 65 may press into a similarly shaped recess 14 in the plate 2. This would form a sort of friction catch to maintain the two pins in their alignment along the gunwale, and at the same time allow the pin 7 to be swung to 70 one side or the other by a little extra pressure.

When it is desired to render this row lock inoperative, it is only necessary to swing the pin 7 around until the end of the plate 5 passes from underneath the flanged lip 4, as 75 shown in Fig. III, when the pin 7 and swivel plate 5 may be lifted off from the pin 8. This would allow only the single pin 8 to remain, and would not serve as a row lock.

I claim as my invention—

1. The combination of the fixed pin 8, the swivel plate 5 pivoted to swing around the base of the pin 8, and carrying the pin 7 at its other end; and means adapted to retain said swivel plate in normal position but capable of having its connection with said plate broken in the event of extra pressure on the oar, substantially as described. 80 85

2. The combination of the fixed pin 8, the gunwale plate 2 provided with the flanged lip 4, and the swivel plate 5 pivoted to swing around the base of the pin 8, carrying the pin 7, and engage the flanged lip 4 when the pins 7 and 8 are in alignment with the gunwale; substantially as described. 90 95

3. The combination of the gunwale plate 2

provided with the collar 3 near the fore end and the flanged lip 4 near the rear end, the fixed pin 8 passing through the collar 3; the swivel plate 5, pivoted to swing around the collar 3 and engage the flanged lip 4 with its other end and carrying the pin 7, the small spring 12 on the bottom of the swivel plate 5

to engage the recess 14; all substantially as described.

HENRY W. STONE.

In presence of—

A. M. EBERSOLE,

C. G. EDWARDS.