

(No Model.)

M. WATKINS & E. T. RUGG.  
GATE HINGE.

No. 507,191.

Patented Oct. 24, 1893.

FIG. 1.

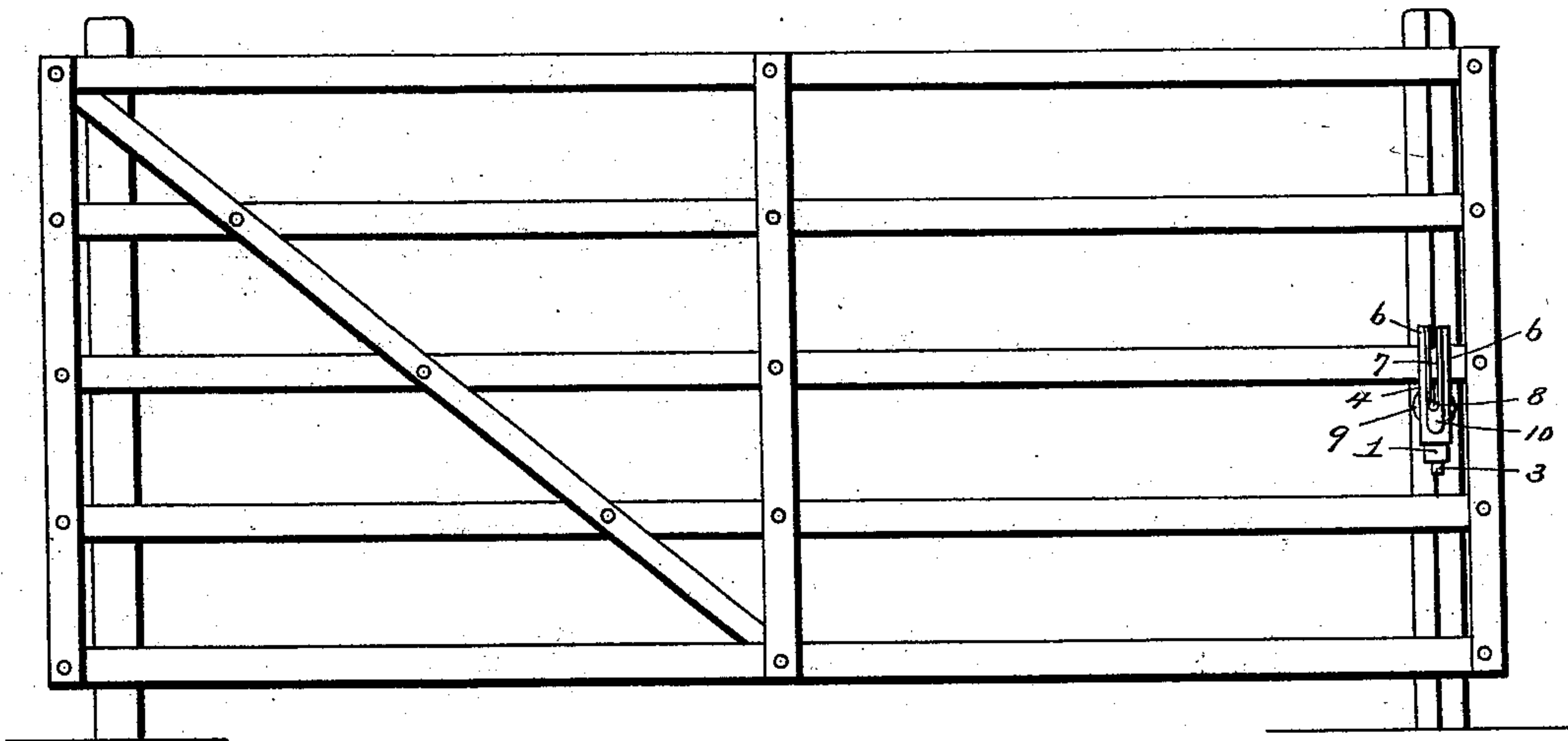


FIG. 2.

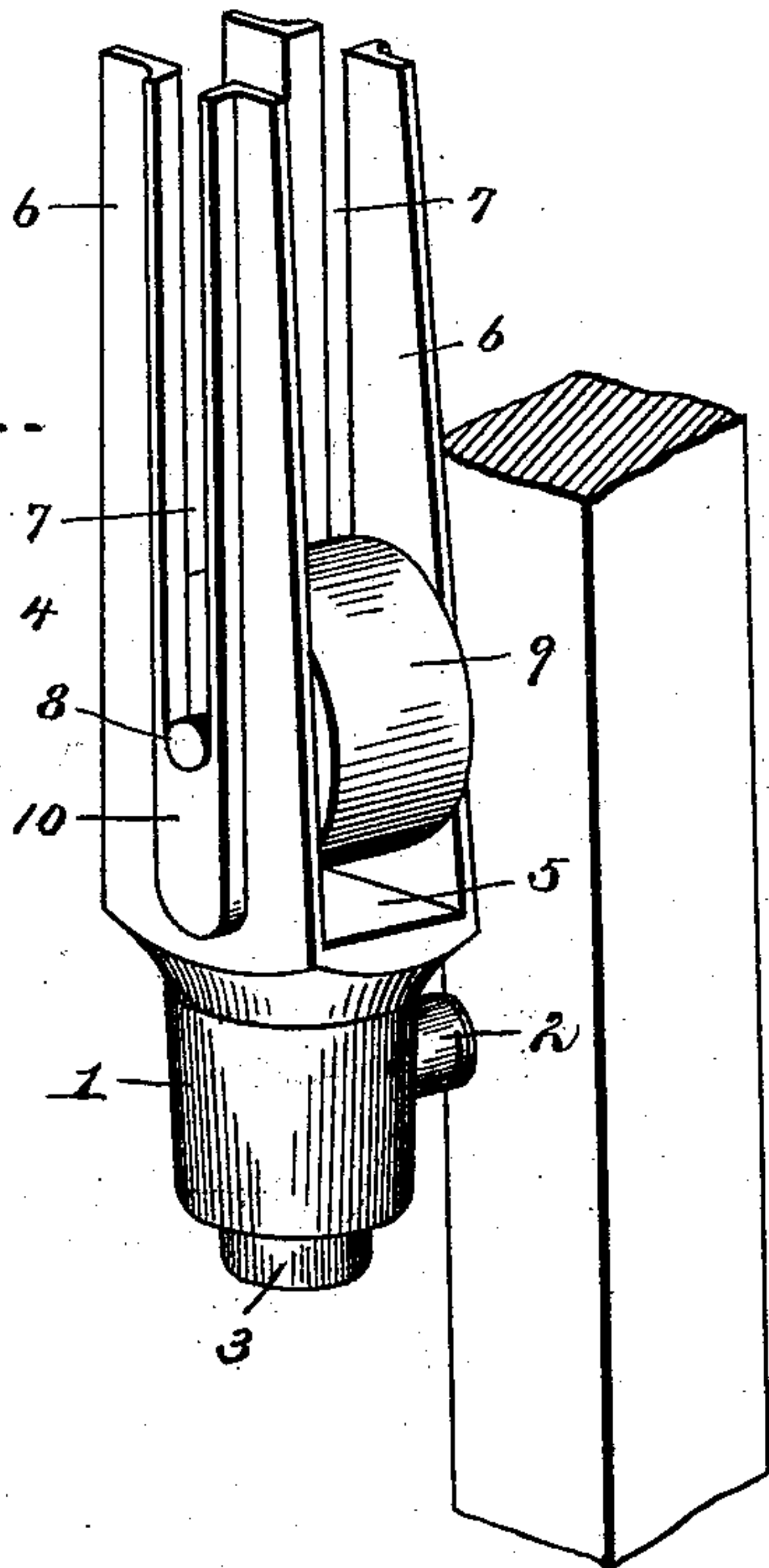
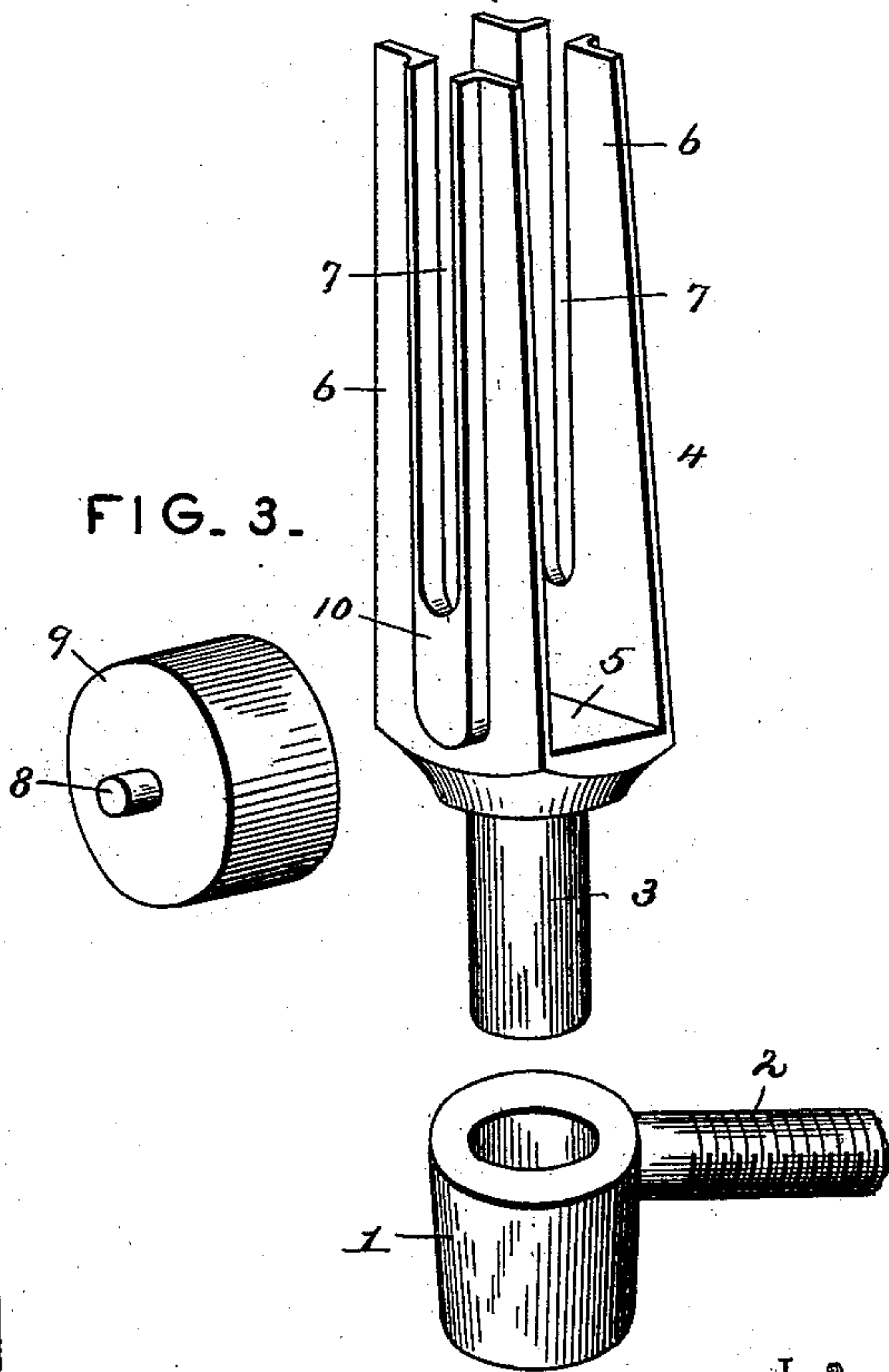


FIG. 3.



Witnesses

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# UNITED STATES PATENT OFFICE.

MAURICE WATKINS AND EPHRAIM T. RUGG, OF ALEXANDRIA, OHIO.

## GATE-HINGE.

SPECIFICATION forming part of Letters Patent No. 507,191, dated October 24, 1893.

Application filed March 28, 1893. Serial No. 468,024. (No model.)

*To all whom it may concern:*

Be it known that we, MAURICE WATKINS and EPHRAIM T. RUGG, citizens of the United States, residing at Alexandria, in the county of Licking and State of Ohio, have invented a new and useful Gate-Hinge, of which the following is a specification.

This invention relates to improvements in combined gate hinges and rollers, and has for its object to produce a device of the character set forth with improved facilities for use in connection with sliding gates, and is arranged to maintain the gate in a vertical position while it is being opened or closed, and thus prevent it from sagging or binding side-wise against the post.

With this and other objects in view, the invention consists of the construction and arrangement of the parts thereof as will be hereinafter more fully described and claimed.

In the drawings: Figure 1 is an elevation of a gate, showing the hinge and roller applied thereto. Fig. 2 is a perspective view of a part of the post showing the improved hinge and roller connected thereto. Fig. 3 is a perspective view of the parts of the hinge and roller separated from each other.

Similar numerals of reference indicate corresponding parts in the several figures of the drawings.

Referring to the drawings, the numeral 1 designates a socket having an opening there-through in a vertical plane and integrally formed with a horizontally-disposed screw-shank 2, that meets the said socket near the lower edge of one side thereof. The said screw-shank is caused to enter the post in one corner thereof, as shown in Figs. 1 and 2. A depending post 3 is movably or vibrantly fitted in the socket 1, and said post is integrally formed and depends centrally from the bottom of a bracket 4, that is bifurcated, as at 5, and formed with upwardly-projecting lengthened arms 6, on two sides thereof that are oppositely situated, the opposite two sides of the bracket being open and forming the bifurcation or passage through the bracket. The said arms 6 are of themselves vertically slotted, as at 7, and said slots of the arms are opposite to each other and are open at the upper ends of the said arms to receive the bearing-ends 8 of a roller 9 that is rotat-

ably and removably mounted in the said bracket. The metal on the opposite sides or walls of the slots 7 is thickened, as at 10, to provide outwardly extending vertical flanges and a reinforced bearing surface for the bearings 8 of the roller 9, thereby strengthening the arms at the points where most needed and avoiding the employment of surplus metal at points where it would be unnecessary and serve no useful function. This construction materially lightens the bracket and at the same time preserves its strength to the necessary degree.

In operation either one of the bars of a gate, as may be desired, is placed between the arms 6 of the bracket so that its lower edge bears upon the roller 9. The arms are of such length as to extend above the upper edge of the engaging bar and thereby form a more stable support and effectually prevent the gate from becoming accidentally disengaged from the hanger. When the gate is opened or closed the bar is caused to slide upon the roller 9, through the bracket, and this sliding movement may be used separately for the intended purpose, or conjointly with a swinging movement which will be permitted through the rotating position of the bracket in the socket 1. The gate is readily removable from the bracket, so that it may be elevated or depressed as desired either to pass over an embankment of snow, or to form an opening to provide ready access between two adjacently-situated closures, or be caused to closely fit against the ground.

The device as a whole works so easily that the post can be situated at any angle without causing the gate to bind or rub, and it will be observed that only three pieces are employed in the construction of the improved device. It is preferable, however, that the screw-shank 2 be inserted directly in the corner of the post, as shown, so as to permit the gate to swing freely after being pushed back.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having described the invention, what is claimed as new is—

The combination with a supporting post and

a sliding gate having horizontal bars, of a vertically disposed socket provided with a horizontal screw shank inserted in the post, a bracket having a depending pivot post fitted  
5 in said socket and comprising a pair of oppositely disposed vertically arranged arms having vertical bearing slots therein and provided with outwardly extending flanges adjacent to the slots to increase the bearing surface, said arms receiving one of the bars of  
10 the gate between them and projecting sufficiently above such bar to prevent the gate becoming accidentally detached, and a roller

having journals arranged in said slots, the roller being located below the adjacent bar of the gate and forming a support for the latter, substantially as described. 15

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

MAURICE WATKINS.  
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Witnesses:

JAMES R. LADD,  
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