

(No Model.)

P. RENS LAND & C. FISHER.

DUMPING GRATE.

No. 382,055.

Patented May 1, 1888.

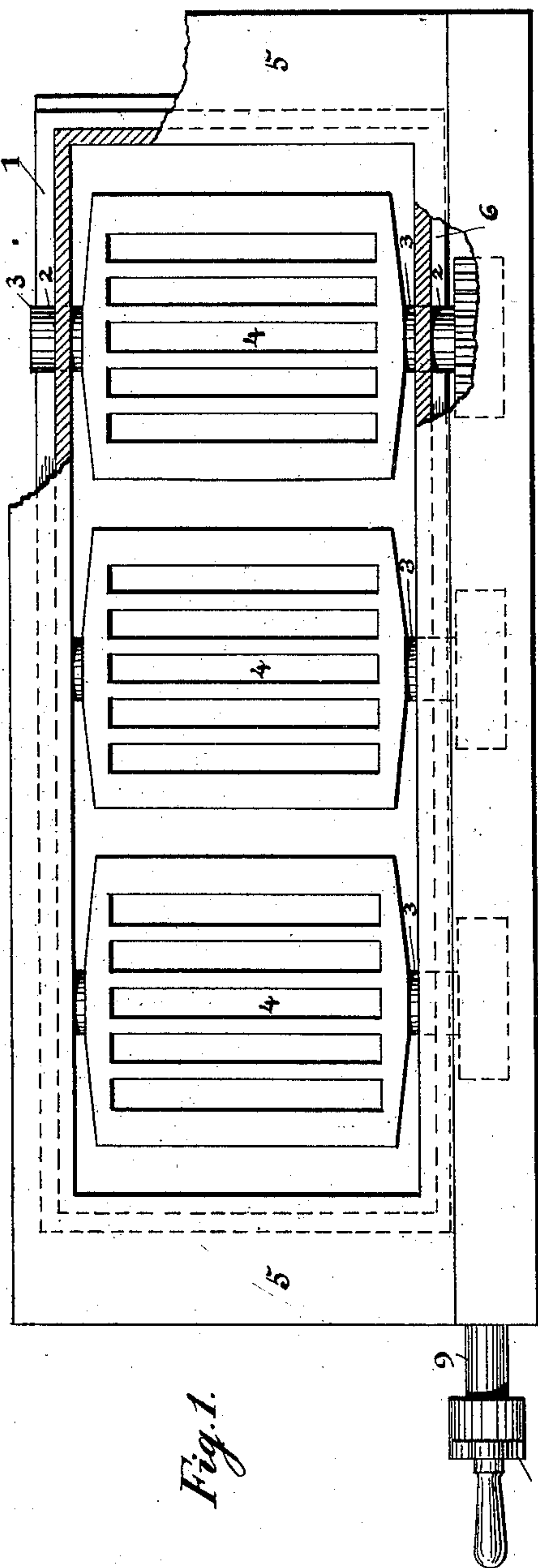


Fig. 1.

WITNESSES:

D. C. Reusch.
E. M. Clark.

Fig. 2.

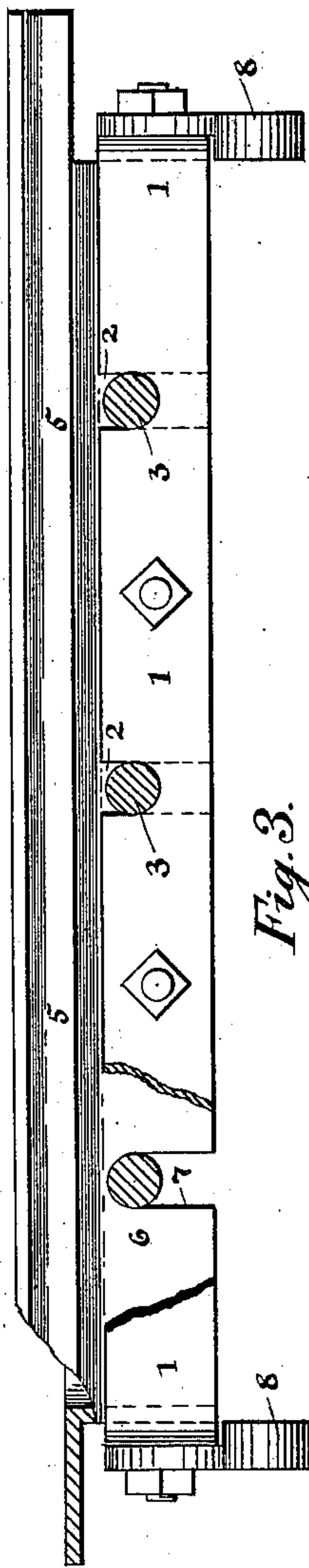
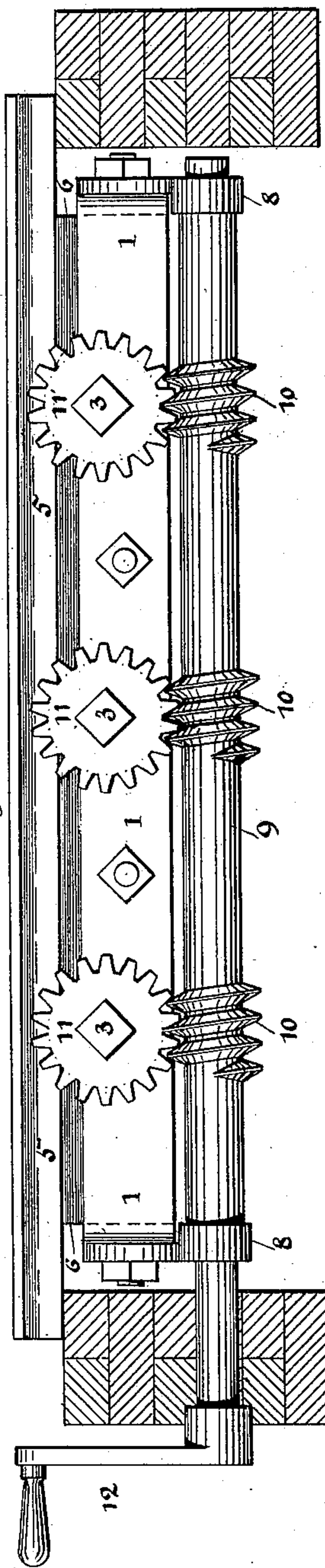


Fig. 3.



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UNITED STATES PATENT OFFICE.

PETER RENSLAND AND CHARLES FISHER, OF PORT JERVIS, NEW YORK.

DUMPING-GRATE.

SPECIFICATION forming part of Letters Patent No. 382,055, dated May 1, 1888.

Application filed July 20, 1887. Serial No. 244,833. (No model.)

To all whom it may concern:

Be it known that we, PETER RENSLAND and CHARLES FISHER, of Port Jervis, in the county of Orange and State of New York, have invented a new and Improved Dumping-Grate, of which the following is a full, clear, and exact description.

Our invention relates to improvements in grates; and it consists in the peculiar construction and arrangement of parts, as hereinafter fully described, and pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the grate and frame, partly broken away. Fig. 2 is a rear elevation, partly broken away; and Fig. 3 is a front elevation of the same.

In carrying out the invention a rectangular frame, 1, is constructed of any suitable material, provided with a series of semicircular recesses, 2, in the upper side edges, the recesses in one side being in alignment with the recesses in the opposing side, as illustrated in Fig. 1.

In the aforesaid recesses 2 the trunnions 3 of a series of independent grates, 4, are journaled, the grates being of a number sufficient to essentially fill the rectangular space encompassed by the frame 1. The contiguous edges of the grates are so spaced as that each grate may be given a complete revolution without interference with the adjoining ones.

A rectangular capping-frame, 5, is next provided, having a downwardly-projecting flange, 6, integral with its inner edges, which flange is slotted, as at 7, vertically at intervals each side from the bottom upward, the said slots being spaced equally with the recesses 2 in the body-frame, and are made of a width and depth slightly greater than the diameter of the grate-trunnions 3.

The grates having been placed in their bearings, the flange of the capping-frame is passed down within the body-frame, the sides and ends of the two frames being in close contact,

the slots 7 in the capping-frame 5 receiving the trunnions of the grates, and the upper horizontal portion of the said frame 5 is made to rest upon and cover the body-frame. The two frames are thereupon united by bolts and nuts or in any other suitable or approved manner, the projecting outer ends and sides of the capping-frame being utilized to suspend the grates, as illustrated.

To the ends of the body-frame 1 downwardly and outwardly projecting bars 8 are detachably secured, in which a longitudinal shaft, 9, is journaled, which shaft is provided with a crank-arm, 12, at one end, and integral worms 10 below the trunnions of each grate. The trunnions upon this side of the grate-frame are made to project out over the worms and have keyed thereon gear-wheels 11, adapted to mesh with said worms, as shown in Fig. 3. Thus by rotating the shaft 9 the grates may be turned at any angle to the frame and the ashes dumped; or they may be turned completely over and the faces used alternately.

It will be observed that the parts going to make up the grates and frames are interchangeable, and that the shaft may therefore with little trouble be placed upon either side of the frames.

From the foregoing description, taken in connection with the drawings, the further operation will be readily understood.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

A grate-frame consisting of the frame 1, having the semicircular recesses 2 in its upper side edges, and the capping-frame 5, covering both the sides and ends of the frame and provided with the flange 6, having the vertical slots 7 and secured to the said frame, substantially as herein shown and described.

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Witnesses:

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