

*F. Rumsf,*  
*Derrick.*

N<sup>o</sup> 53,044.

*Patented Mar 6, 1866.*

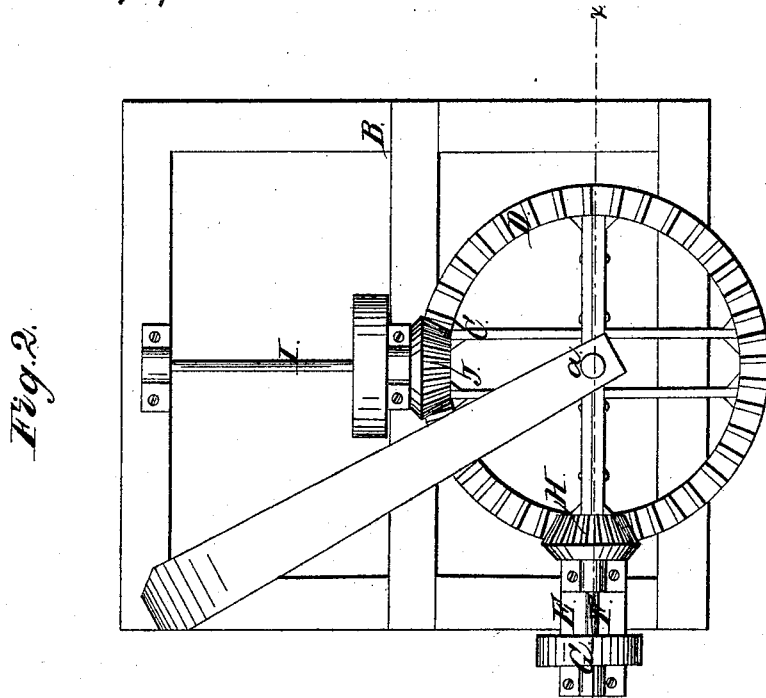
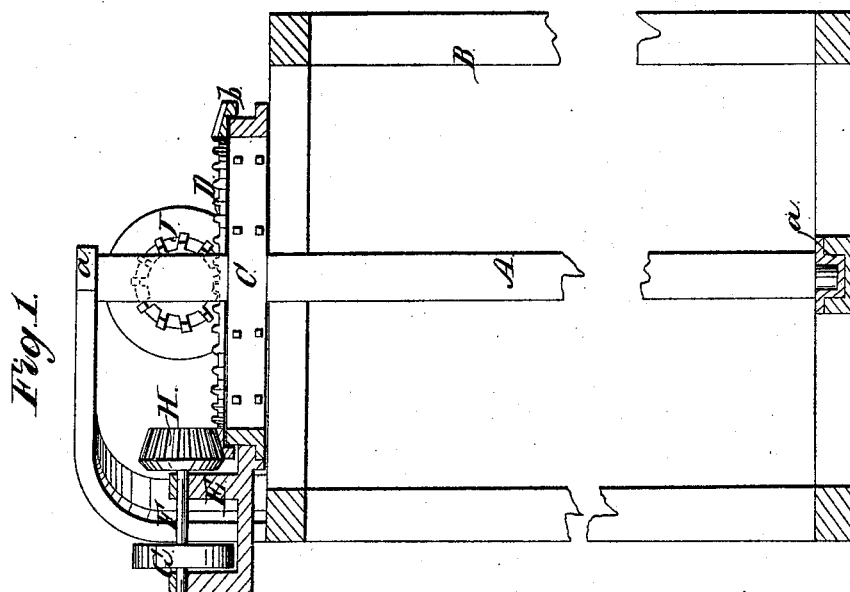


Fig. 2.



*Fig 1*

*Witnesses.*

Wm. Cairn  
Goodfarington

*Inventor.*

F Rumpf  
By Mervin C  
attys



# UNITED STATES PATENT OFFICE.

F. RUMPF, OF COLD SPRING, NEW YORK.

## IMPROVEMENT IN CRANES.

Specification forming part of Letters Patent No. 53,044, dated March 6, 1866.

*To all whom it may concern:*

Be it known that I, F. RUMPF, of Cold Spring, in the county of Putnam and State of New York, have invented a new and Improved Application of Power to Cranes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side sectional view of my invention, taken in the line *xx*, Fig. 2; Fig. 2, a plan or top view of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a simple attachment for cranes whereby an ordinary hand-crane, (those which have been hitherto operated by the manual turning of a crank) may be operated by other power from a fixed shaft—that is to say, a shaft running in fixed bearings—and the crane rendered capable of being turned in the same way as usual, or as the ordinary hand-crane.

A represents the upright post or shaft of the crane, having its bearings *a* in a suitable frame, B, and passing centrally through a horizontal wheel or circular bed, C, which is keyed or otherwise secured to the post or shaft A. On this circular bed C there is placed a beveled-toothed rim, D, in such a manner that it may turn freely on C and be prevented from casually slipping off from it. To effect this result the rim D may be provided with a pendant flange, *b*, to project down over the edge of the bed C, as shown in Fig. 1.

To the wheel or bed C there is secured a bracket, E, in which a shaft, F, is fitted, having upon it a pulley, G, and a bevel-pinion, H, the latter gearing into the rim D.

I is a shaft placed horizontally on the frame

B, and having a bevel-pinion, J, upon it, which also gears into the toothed rim D. The power is applied to the crane for hoisting purposes through the medium of this shaft I, pinion J, and rim D, the latter, as it rotates, turning the pinion H, which gives motion to shaft F, which, through the medium of a belt or gearing, turns the windlass of the crane. By this arrangement it will be seen that the crane may be turned either to the right or left without in the least affecting either the driving or hoisting mechanism, as the toothed rim D is allowed to turn independently of the wheel or bed C, and consequently can turn the shaft F from the driving-shaft I even when the crane or post or shaft A is turned. It will be seen, therefore, that by this invention an ordinary hand-crane may be converted into a power-crane.

The driving-shaft I may be provided with an idle-pulley and two working-pulleys, one of the latter being provided with a straight and the other with a cross belt, so that the shaft F may be rotated in either direction to hoist and lower articles.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The adaptation of an ordinary hand-crane to a power-crane by means of the loose toothed rim D, placed on the wheel or bed C on the crane post or shaft A, driven from the power-shaft I by a pinion, J, and communicating motion by a pinion, H, to a shaft, F, which has its bearings in a bracket, E, attached to the wheel or bed C, and connected with the windlass of the crane by a belt, chain, or gearing, substantially as shown and described.

F. RUMPF.

Witnesses:

WILLIAM HUMPHREYS, Jr.,  
OTTO HOFMANN.