

(No Model.)

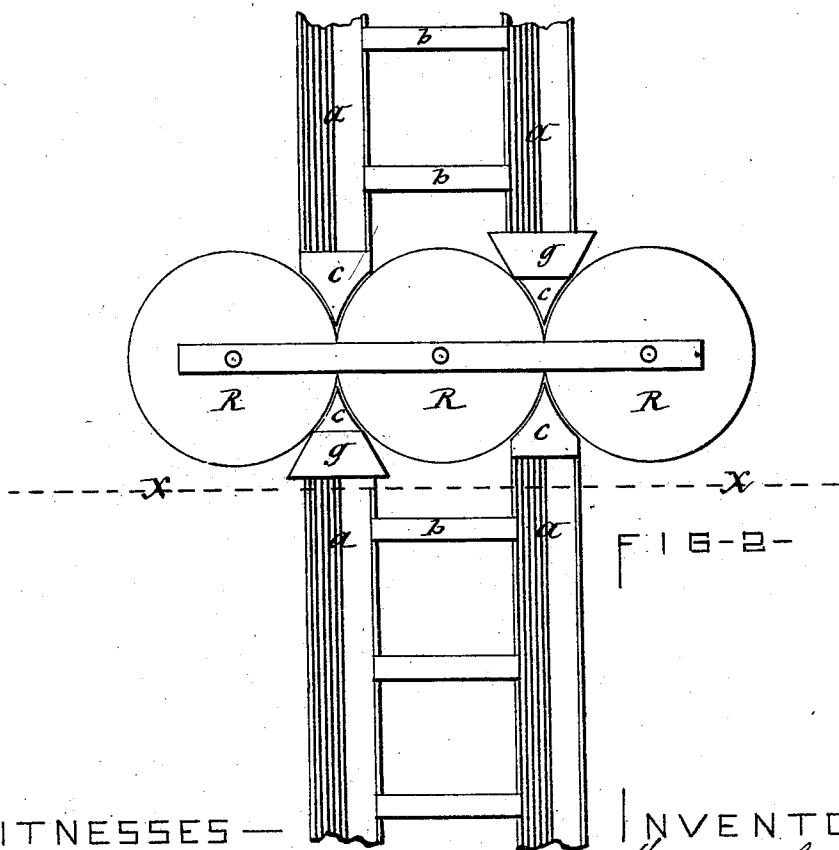
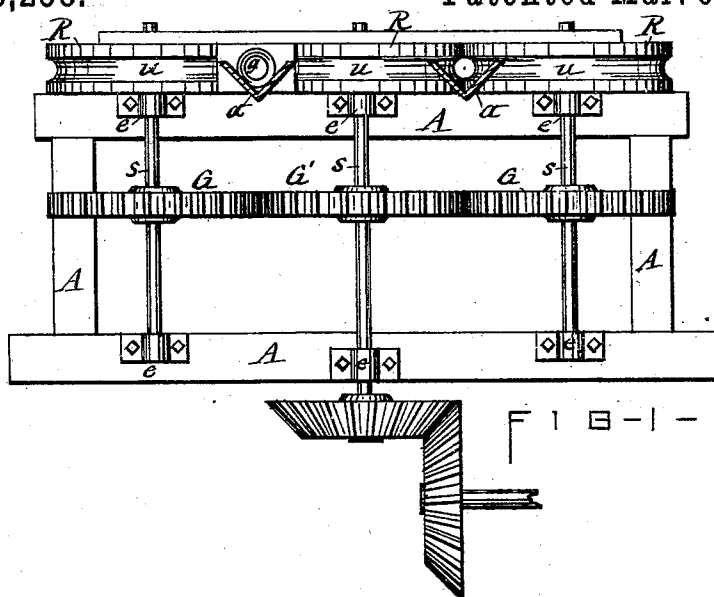
2 Sheets—Sheet 1.

W. COLLINS.

MACHINE FOR FINISHING METALLIC PIPES.

No. 273,258.

Patented Mar. 6, 1883.



WITNESSES—  
—*Wm. S. Raymond*—  
—*G. Bendixen*—

INVENTOR—  
—*William Collins*—  
—*per Duell, Lassett & Co.*—  
—*by Attorney*—

(No Model.)

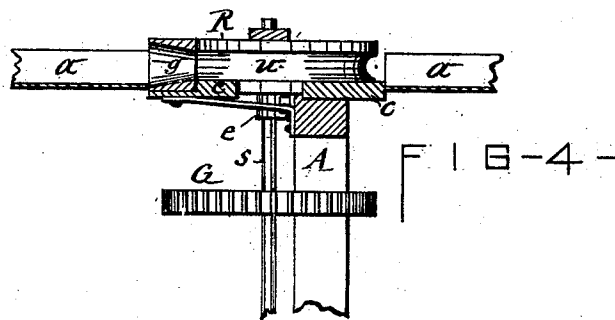
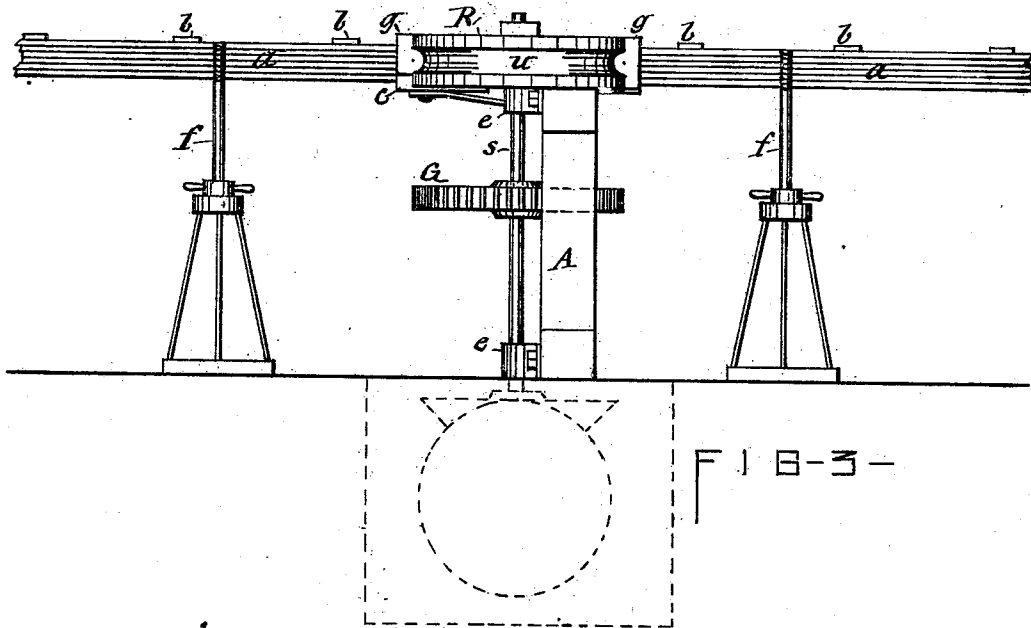
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WITNESSES—

*Chas. E. Raymond* .....  
*G. Bendixon* .....

INVENTOR—

*William Collins* .....  
*per Rev. L. S. S. S.* .....  
*his Atty.* .....

# UNITED STATES PATENT OFFICE.

WILLIAM COLLINS, OF SYRACUSE, NEW YORK.

## MACHINE FOR FINISHING METALLIC PIPES.

SPECIFICATION forming part of Letters Patent No. 273,258, dated March 6, 1883.

Application filed October 16, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM COLLINS, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Machines for Finishing Metallic Pipes, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention consists in an improved arrangement of circumferentially-grooved rollers, between which to pass the pipes to be finished, and in certain novel means for guiding the said pipes in their passage to and from the said rollers, whereby the operation is greatly facilitated and expedited, as hereinafter more fully explained.

Referring to the annexed drawings, Figure 1 is a vertical transverse section of my invention, taken on line *x x*, Fig. 2. Fig. 2 is a plan view of the same. Fig. 3 is a side elevation, and Fig. 4 is a detail view of the guide which maintains the pipe in the same plane with that of the groove of the rollers.

Similar letters of reference indicate corresponding parts.

R R R represent three rollers mounted on vertical shafts *s*, which are journaled in suitable bearings, *e*, secured to a rigid upright frame, *A*, said rollers being arranged with their peripheries in juxtaposition, and provided with a circumferential groove, *u*, of semi-circular form in cross-section, so that the grooves of two adjacent rollers form a circular opening between said rollers. By means of gears *G G G'*, connected with the respective shafts and meshing in one another, the rollers R R R are caused to rotate in unison with each other.

*a a* represent horizontal troughs or ways, arranged at opposite sides of the rollers R R R, and in range with the circular opening formed between the rollers by their grooves *u*, as before described. Said troughs are supported adjustably in their elevation by jacks or standards *f*, adapted to be raised or lowered, as may be required to bring the troughs in range with the grooves *u*, the rollers R being removable from their shaft and interchangeable with rollers having grooves of different sizes to operate on pipes of different diameters.

In the operation of the machine the pipes are passed through one and back through an-

other of the circular openings between the rollers R R R, the troughs *a a* serving to support and guide the pipes in their aforesaid passage.

In order to dispense with the labor of lifting the pipes from one trough to another, and to facilitate and expedite the operation, I connect the troughs by cross-skids *b b*, placed nearly or quite even with the top thereof. This allows the pipes to be rolled from trough to trough.

Between the rollers I arrange a guide, *c*, which reaches, as near as possible, to the point of contact between said rollers, and has its upper face in line with the lower edge of the grooves *u*, thereby insuring a true entrance of the pipes into the said grooves, and guarding against the pinching of the sides of the pipes between the edges of the grooves. Aside from the guide *c*, I employ the usual funnel-shaped guide, *g*, to facilitate the entrance of the pipes between the rollers.

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

1. The combination and arrangement of three or more circumferentially-grooved rollers, R R R, mounted on vertical shafts, and placed with their peripheries in juxtaposition, suitable gearing, *G G G'*, connected with said shafts for operating them in unison, and horizontal tongues *a a*, arranged at opposite sides of the rollers and in range with the grooves of two adjacent rollers, substantially as shown and described.

2. The combination of three or more circumferentially-grooved rotary rollers, R R R, mounted on vertical shafts, and placed with their peripheries in juxtaposition, a guide, *c*, reaching between the rollers, and arranged with its upper face in line with the lower edge of the groove of the roller, ways *a a*, arranged at opposite sides of the rollers, and skids *b*, connecting the ways, substantially as described and shown, for the purpose set forth.

In testimony whereof I have hereunto signed my name and affixed my seal, in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 28th day of September, 1882.

WILLIAM COLLINS. [L. S.]

Witnesses:

C. H. DUELL,  
F. H. GIBBS.