

C. F. NYSTROM.
ROLL TURNING DEVICE.
APPLICATION FILED OCT. 24, 1910.

1,006,871.

Patented Oct. 24, 1911.

2 SHEETS-SHEET 1.

Fig. 1.

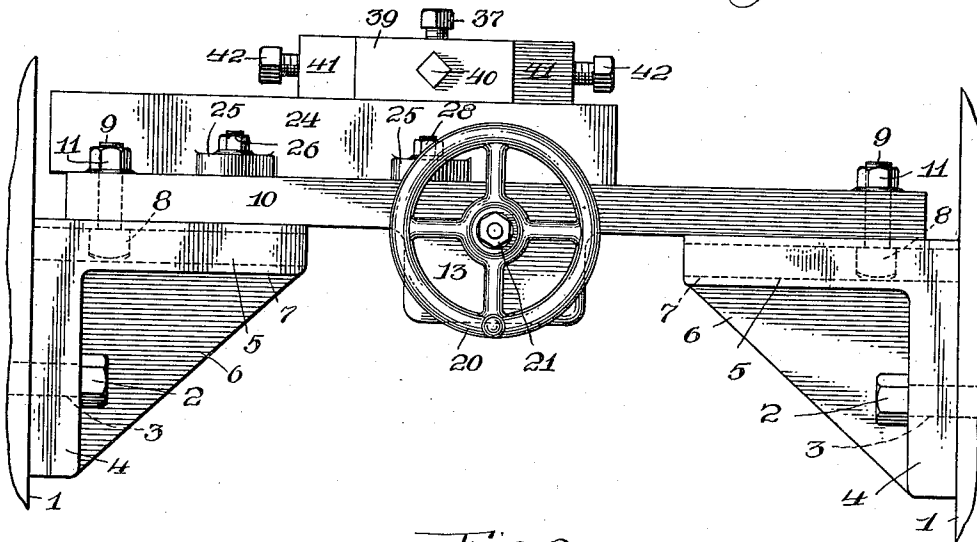
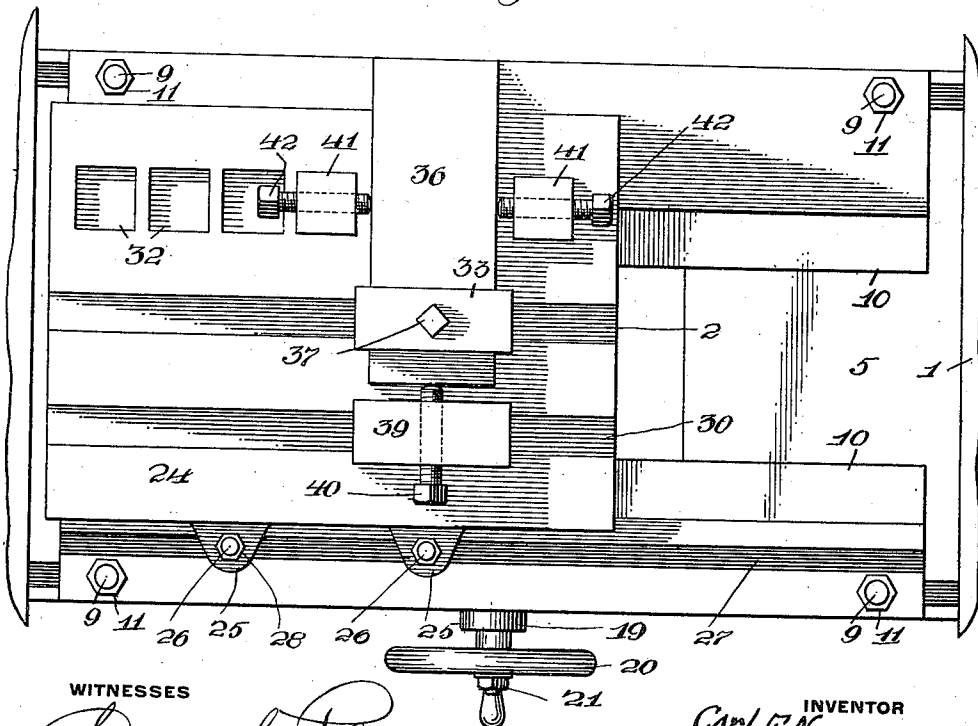


Fig. 2.



WITNESSES

Samuel Payne
W. H. Butler

by

INVENTOR

C. F. NYSTROM,

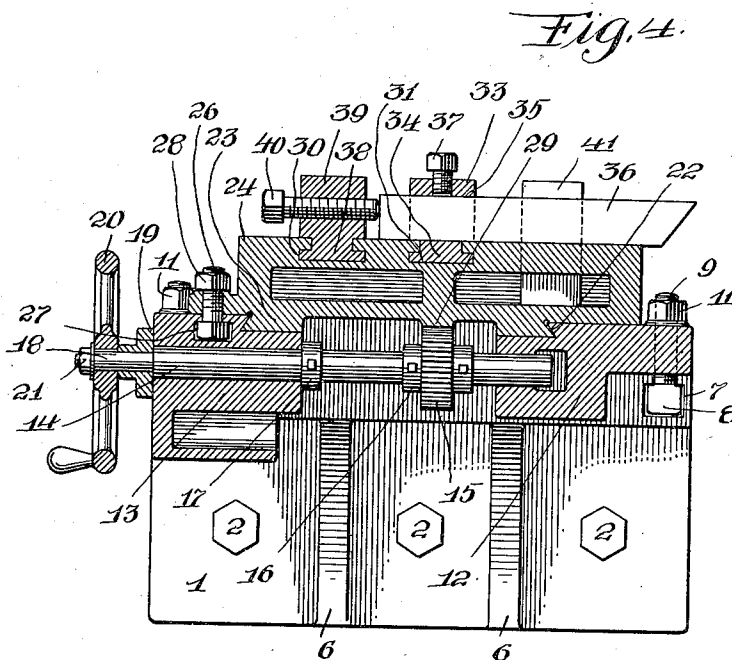
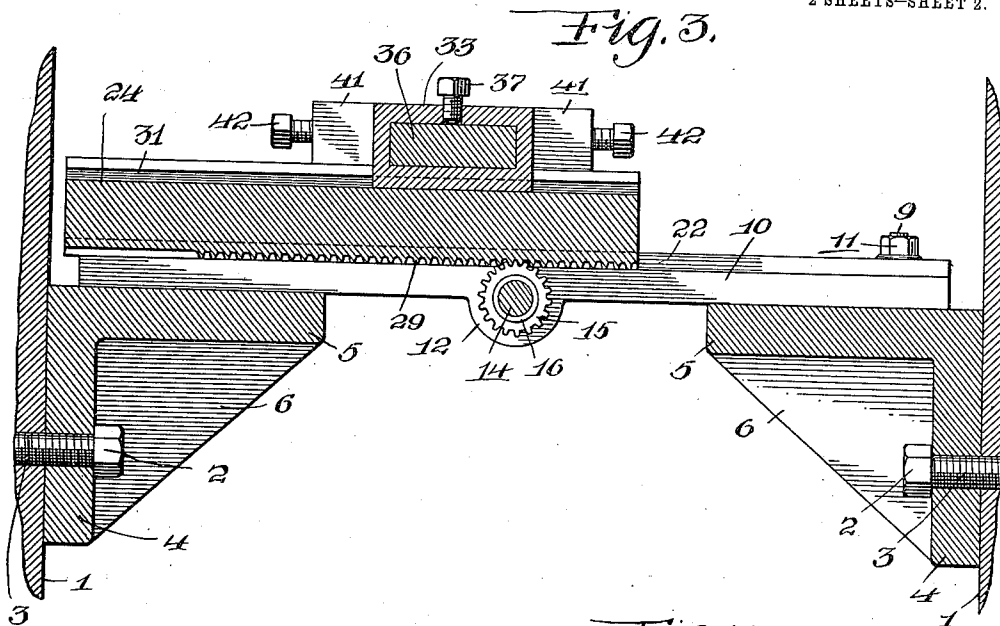
H. C. Dyer & Co.
Attorneys.

C. F. NYSTROM.
ROLL TURNING DEVICE.
APPLICATION FILED OCT. 24, 1910.

1,006,871.

Patented Oct. 24, 1911.

2 SHEETS—SHEET 2.



WITNESSES

Samuel Payne
K. K. Butler

INVENTOR
CARL F. NYSTROM

H. C. Ewert Co.
Attorneys.

UNITED STATES PATENT OFFICE.

CARL F. NYSTROM, OF BRADDOCK, PENNSYLVANIA, ASSIGNOR OF ONE-THIRD TO RICHARD SEAQUIST, OF BRADDOCK, PENNSYLVANIA, AND ONE-THIRD TO ANDREW V. NYSTROM, OF McKEESPORT, PENNSYLVANIA.

ROLL-TURNING DEVICE.

1,006,871.

Specification of Letters Patent.

Patented Oct. 24, 1911.

Application filed October 24, 1910. Serial No. 588,660.

To all whom it may concern:

Be it known that I, CARL F. NYSTROM, a citizen of the United States of America, residing at Braddock, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Roll-Turning Devices, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to a roll turning device, and more particularly to a device that can be used for dressing, turning, and removing irregularities from the peripheries of rolls without necessitating the dismounting or removal of rolls from housings or other supports.

The primary object of the invention is to provide a novel device for dressing rolls in a manner as will be hereinafter set forth whereby the periphery of a roll can be evenly dressed, the device being particularly designed for dressing the rolls of tin mills where it is essential that the surfaces of the rolls be maintained in a smooth and perfect condition.

A further object of the invention is to provide a roll turning device with a novel tool holder that can be easily and quickly adjusted.

A still further object of the invention is to provide a tool that can be easily moved between the housings of rolls to thoroughly and evenly dress the surface of a roll.

With these and such other objects in view, the invention consists of the novel construction, combination, and arrangement of parts to be hereinafter specifically described and then claimed.

Reference will now be had to the drawings forming a part of this specification, wherein there is illustrated a preferred embodiment of the invention, but it is to be understood that the structural elements thereof are susceptible to such changes as fall within the scope of the appended claims.

In the drawings: Figure 1 is a front elevation of the device. Fig. 2 is a plan of the same. Fig. 3 is a longitudinal sectional view of the device, and Fig. 4 is a cross sectional view of the same.

Like numerals of reference designate cor-

responding parts throughout the several views.

1 denotes portions of housings adapted to support rolls (not shown). Connected to the housings 1 by screw bolts 2 entering threaded openings 3 provided therefor in said housings are angle brackets 4, said brackets having the horizontal portions thereof braced and reinforced by webs 6. The horizontal portions 5 of the brackets 4 are provided with longitudinal inverted T-shaped slots 7 and extending into said slots are the headed ends 8 of bolts 9, said bolts extending upwardly through a table 10 arranged upon said brackets, and screwed upon the upper ends of the bolts are nuts 11 adapted to lock the table upon said brackets. It is through the medium of the bolts 9 and the nuts 11 that the table can be removed or adjusted between said brackets.

The table 10 is provided with two central depending bearings 12 and 13 for a transverse shaft 14, said shaft extending through the bearing 13 into the bearing 12. The shaft adjacent to the bearing 12 is provided with a pinion 15 held upon said shaft by collars 16. The shaft 14 is also provided with a collar 17 adapted to engage the rear side of the bearing 13, and the forward end of the shaft is reduced, as at 18, and provided with a collar 19 and a hand-wheel 20, said hand-wheel being retained upon the reduced end of the shaft by a nut 21.

The top of the table 10 is provided with a dove-tail longitudinal groove 22 and slidably mounted in said groove is the depending tongue 23 of a tool holder 24, said tool holder being rectangular in plan. The tool holder 24 has two rearwardly extending lugs 25 and detachably mounted in these lugs are bolts 26 having the lower headed ends thereof extending into inverted T-shaped longitudinal grooves 27 provided therefor in the table 10. The upper ends of the bolts have nuts 28, whereby the tool holder can be fixed relative to the table 10. The tool holder 24 has a longitudinal rack 29 and meshing with this rack is the pinion 15, which is adapted to longitudinally shift the tool holder when the nuts 28 are released to allow the bolts 26 to ride in the grooves 27. The top of the tool holder 24 is pro-

vided with two longitudinal inverted T-shaped grooves 30 and 31 and with a plurality of longitudinally disposed vertical openings or sockets 32 arranged in parallelism with respect to the grooves 30 and 31.

Slidably mounted upon the top of the tool holder 24 is a tool clamp 33 having a depending tongue 34 extending into the groove 31. The tool clamp 33 has an opening 35 to receive the rear end of a tool 36, said tool being retained within the clamp by a set screw 37.

Slidably mounted in the groove 30 is the tongue 38 of a block 39 having a set screw 40 adapted to engage the rear end of the tool 36.

Detachably mounted in the vertical openings or sockets 32 are posts 41 arranged at the sides of the tool 36, said posts having set screws 42 adapted to engage the sides of the tool 36 and hold said tool in its adjusted position. The tool 36 represents various kinds of bits or instruments that can be placed in position for turning the periphery of a roll supported between the housings 1.

It is through the medium of the hand-wheel 20 that the tool holder 24 can be shifted upon the table 10 after the tool 36 has been properly set upon the tool holder. Adjustment of the tool holder 36 can be accomplished by releasing the set screw 37 and adjusting the set screws 40 and 42, the former shifting the tool 36 within the clamp 33 and the latter engaging and bracing the tool within the clamp 33. When the tool 36 is secured in position by the set screws 37, 40, and 42, the tool cannot shift upon the tool holder, and when the tool holder has been locked upon the table by the bolts 26 and the nuts 28, said tool holder cannot shift, consequently any amount of grinding can be accomplished upon a roll.

An important feature of the invention resides in the fact that the turning device can be permanently located between housings without interfering with the pass between

two rolls, consequently the roll in front of the turning device can be dressed at any desired time simply by adjusting the turning device during the revoluble movement of the roll.

What I claim, is:

1. A roll turning device comprising a table provided with a dove-tailed groove, a tool holder having a dove-tailed tongue engaging in said groove and provided with a pair of inverted T-shaped grooves and a series of sockets arranged in parallelism with respect to the T-shaped grooves, tool clamping means provided with a tongue engaging in one of the grooves of the holder, a block having a tongue engaging in the other of the grooves of the holder and provided with an adjustable abutment engaging in one end of the tool clamped by said means, and posts mounted in a pair of said sockets and provided with adjustable abutments engaging the sides of the tool clamped by said means.

2. A roll turning device comprising a table provided with a dove-tailed groove, a tool holder having a dove-tailed tongue engaging in said groove and provided with a pair of inverted T-shaped grooves and a series of sockets arranged in parallelism with respect to the T-shaped grooves, tool clamping means provided with a tongue engaging in one of the grooves of the holder, a block having a tongue engaging in the other of the grooves of the holder and provided with an adjustable abutment engaging in one end of the tool clamped by said means, posts mounted in a pair of said sockets and provided with adjustable abutments engaging the sides of the tool clamped by said means, and means carried by the tool holder and engaging with the table for fixing the holder relative to the table.

In testimony whereof I affix my signature in the presence of two witnesses.

CARL F. NYSTROM.

Witnesses:

MAX H. SROLOVITZ,
DAVID FURNIER.