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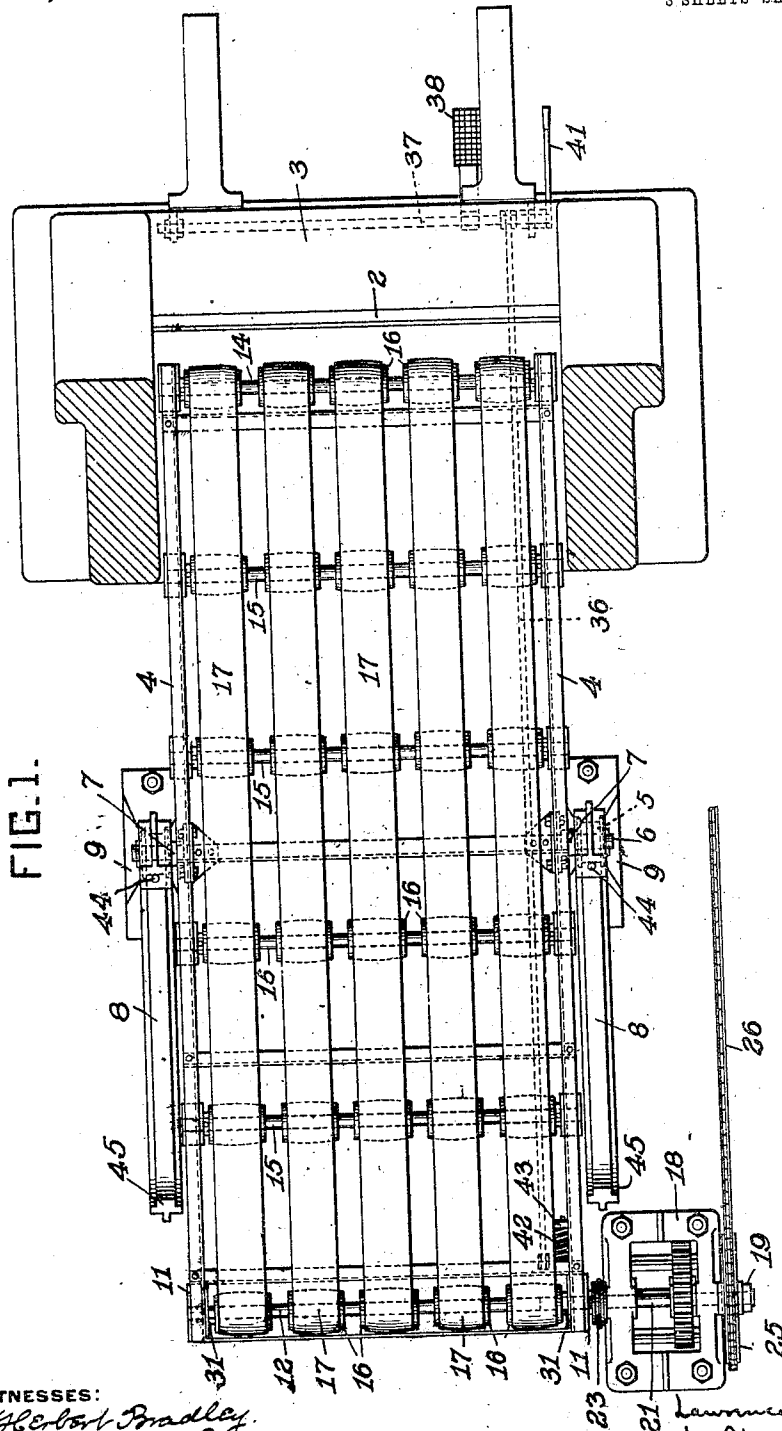


FIG. 1.

WITNESSES:
J. Herbert Bradley
Theodore Huff

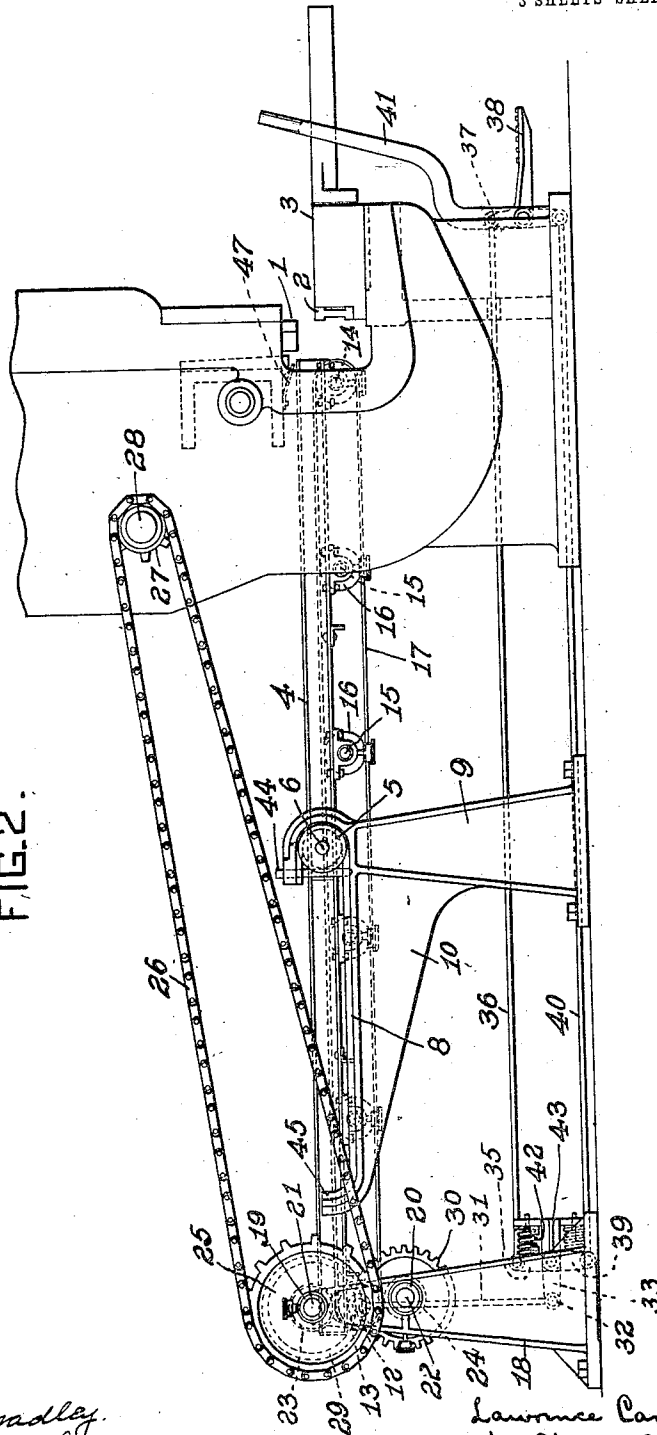
INVENTOR
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L. C. STEELE.
FEED TABLE.
APPLICATION FILED FEB. 24, 1910.

Patented Jan. 14, 1913.
3 SHEETS-SHEET 2.

FIG. 2.



WITNESSES:
J. Herbert Bradley
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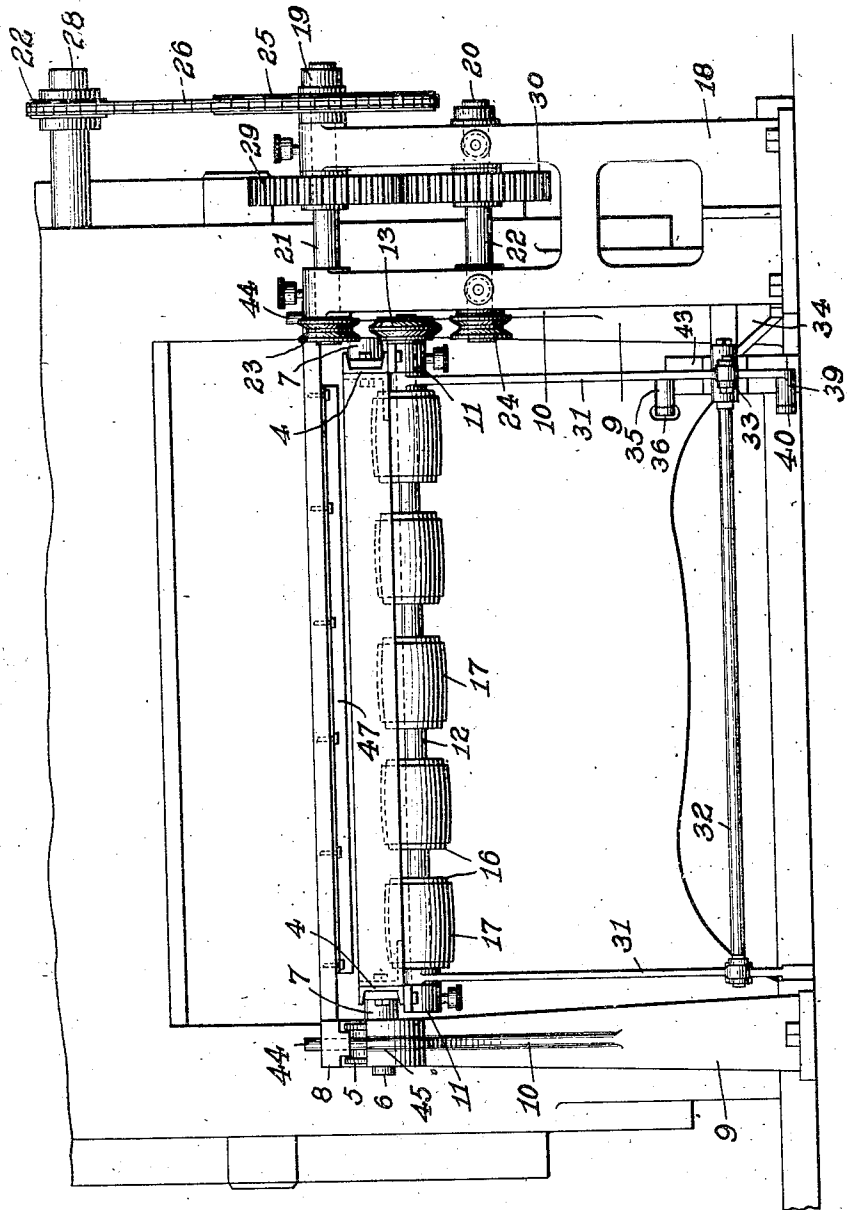
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FEED TABLE.
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3 SHEETS—SHEET 3.

1,050,400.

FIG. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

LAWRENCE CARR STEELE, OF BEAVER, PENNSYLVANIA.

FEED-TABLE.

1,050,400.

Specification of Letters Patent.

Patented Jan. 14, 1913.

Application filed February 24, 1910. Serial No. 545,575.

To all whom it may concern:

Be it known that I, LAWRENCE CARR STEELE, residing at Beaver, in the county of Beaver and State of Pennsylvania, a citizen of the United States, have invented or discovered certain new and useful Improvements in Feed-Tables, of which improvements the following is a specification.

The object of the invention is to provide a feed-table of simple construction, the conveying mechanism of which shall be reversible by convenient means. Means are also provided for permitting the withdrawal of the table from its operative relation with associated mechanism, if for any reason access to the latter is desired.

In the accompanying drawings the invention is illustrated as embodied in a table for feeding sheets or plates, which may be arranged in piles, to a shear.

Figure 1 is a view in plan. Fig. 2 is a side elevation. Fig. 3 is an end elevation.

The shear may be of any suitable construction, having a movable blade 1 operated by any suitable means, not shown, and a fixed blade 2 supported in the end of the stand 3.

The opposite longitudinal beams 4 of the feed-table are pivotally supported at their center upon the opposite rollers 5, mounted on stub-shafts 6 having bearings 7 bolted to the beams, said rollers resting on rails 8 mounted on the opposite standards 9 and brackets 10 projecting therefrom. At the outer ends of the beams 4 are mounted the bearings 11 of the drum-shaft 12, said bearings being preferably fastened beneath the lower flanges of the beams. To the end of drum-shaft 12 is fastened the friction-wheel 13, preferably provided with an angular edge as shown. A second drum-shaft 14 is similarly supported at the inner ends of the beams 4, adjacent to the shears, and any desired additional number of shafts 15 may be provided between said end shafts. Said shafts 12, 15, 14 are provided with belt-carrying surfaces, preferably in the form of series of drums 16, arranged in longitudinal alinement on the succeeding shafts, and on said lines of drums are carried the endless belts 17, which may be of any material desired having the requisite flexibility.

Beside the outer ends of beams 4, adjacent to the friction-wheel 13 on the end of shaft 12, is a standard 18, having bearings 19 and 20 for a pair of shafts 21 and 22, one

above and the other below the line of shaft 12, and each provided on its inner end with a frictional-wheel, 23 and 24 respectively, in the vertical plane of the axis of wheel 13 on shaft 12, the periphery of each wheel 23 and 24 being so shaped as to frictionally engage the angular edge of wheel 13, when the latter is moved into contact with either. On the outer end of one of the shafts, as 21, is fastened the sprocket-wheel 25, connected by a driving-chain 26 with a sprocket 27 on shaft 28, driven from any suitable source of power. In the drawings the shaft 28 is shown for convenience as mounted in the housing of the shear. The shafts 21 and 22 are connected by intermeshing pinions 29 and 30, so that they are driven in opposite directions by shaft 28.

In the upper end of vertical rods 31 are bearings encircling the shaft 12 adjacent to its opposite ends. Said rods are connected at their lower ends to a cross-shaft 32, which is pivotally connected at its end adjacent to standard 18 to the end of horizontal arm 33 of a three-armed lever, centrally pivoted to a bracket 34 on standard 18. The upper arm 35 of said lever is pivotally connected by link 36 to a rock-shaft 37 operated by lever 38, herein shown as a foot-lever. The lower arm 39 of said three armed lever is pivotally connected by link 40 to the end of lever 41, shown as a hand-lever adjacent to foot-lever 38, and loosely fulcrumed on an extension of shaft 37. It will be seen that by depressing foot-lever 38 the shaft 12 and the outer end of the table will be elevated, bringing the wheel 13 into engagement with the upper driven wheel 23, while by moving the hand-lever 41 toward the table, the outer end of the table will be lowered, and wheel 13 brought into engagement with the oppositely driven wheel 24. Springs 42 are interposed between the lever-arms 35 and 39 and abutments 43 on bracket 34, which when the levers are released will return and retain the table and shaft 12 in the neutral position shown.

The rails 8 at their inner ends are turned over the tops of the rollers 5, and are slotted for the reception of keys 44 to retain the table in its forward position adjacent to the shear. The opposite ends 45 of the rails are also turned up to provide a stop for the rollers. If for any reason access to the inner side of the shear is desired, the keys 44 may be withdrawn, and

the table and connected apparatus, moved outwardly a distance equal to the length of rails 8.

It is preferred to attach a transverse depending guide, such as the resilient strip 47, to the under face of the shear housing immediately over the discharge end of the table, in order to guide the sheets beneath the upper blade of the shear.

In operation, the feed-table being adjacent to the shear, and in the neutral position shown, a pile of sheets to be cut into shorter lengths is placed thereon and marked at the desired lines of severance. The operative then depresses the foot-lever 38, thereby elevating the outer end of the table and throwing the wheel 13 into operative frictional engagement with wheel 23. The shaft 12 is thus driven, causing the upper lines of the belts to travel forwardly and carry the pile of sheets beneath the shear to the first line of cut. The operative then releases the lever 38, the travel of the belts at once ceases, and the sheets may be cut. Or if the sheets have been carried slightly too far, the operative by pushing back the lever 41 may cause them to be carried back to the proper point. After severing, the pile of severed sections may be removed from the stand 3, and the pile of sheets again moved forward until the next line of severance comes beneath the shear.

It will be noted that the movable friction wheel 13, and the wheels 23 and 24 together constitute a reversible clutch for causing the belts 17 of the feed-table to travel in either direction, said belts together constituting a single traveling conveyer.

It is obvious that certain features of the invention are applicable to conveying tables which may be used for a variety of purposes.

I claim herein as my invention:

1. In apparatus of the class described, the

combination with a fixed support, of a feed-table mounted and longitudinally movable thereon in a horizontal plane, means carried by the feed table for conveying metal plates, etc., and detachable means adjacent to one end of the table, when in one longitudinal position for operating said conveying means.

2. The combination with a horizontally pivoted feed-table capable of oscillation in a vertical plane, of a conveyer mounted on the table, a shaft carried by the table for operating the conveyer, and a clutch member on said shaft, of a pair of shafts mounted respectively above and below said clutch member, means for driving said shafts in opposite directions, and a clutch member on each of said shafts in the path of oscillation of said first mentioned clutch member.

3. In a feed-table for metal sheets, the combination with a traveling conveyer, a shaft for operating said conveyer, and a clutch member on said shaft, of a pair of shafts and means for driving said shafts in opposite directions, clutch members on said driven shafts, means for shifting said first mentioned clutch member into operative engagement with either of said last mentioned clutch members, and yielding means for holding said first mentioned clutch member in neutral position.

4. In apparatus of the class described, the combination with a fixed support, of a feed table pivotally mounted and longitudinally movable thereon in a horizontal plane, and detachable means adjacent to one end of the table when in one longitudinal position for supporting, elevating and lowering the table.

In testimony whereof, I have hereunto set my hand.

LAWRENCE CARR STEELE.

Witnesses:

ALICE A. TULL,

J. HERBERT BRADLEY.