No. 869,057. PATENTED OCT. 22, 1907.

A. S. CAIRNCROSS.

MACHINE FOR CUTTING FIG BARS AND SIMILAR ARTICLES.

APPLICATION FILED DEC. 10, 1906.

2 SHEETS—SHEET 1.

Fig. 1

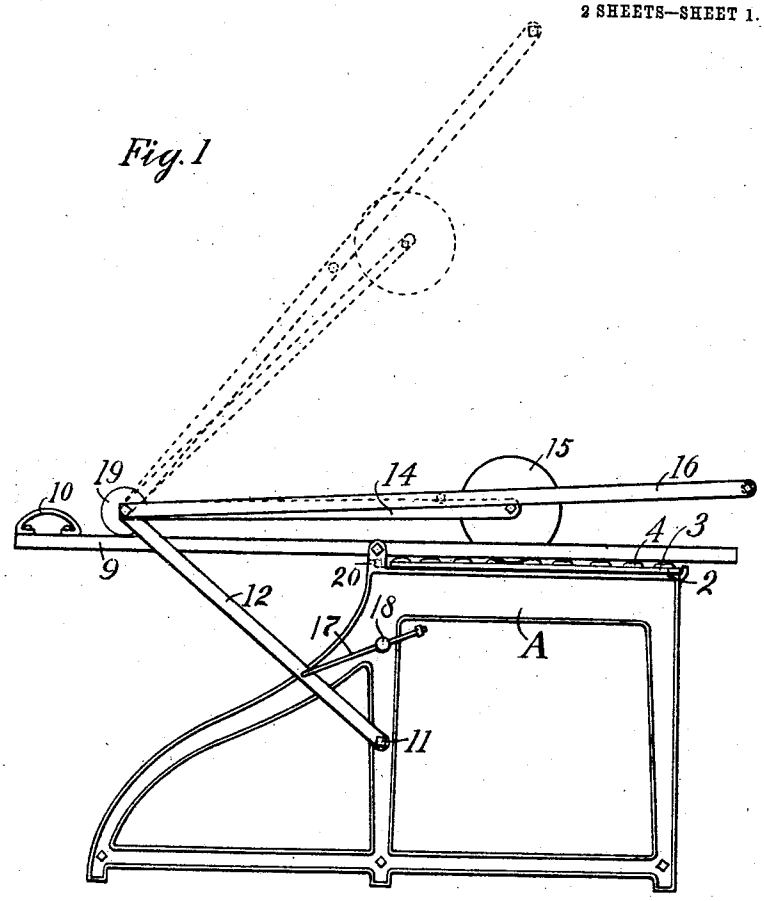
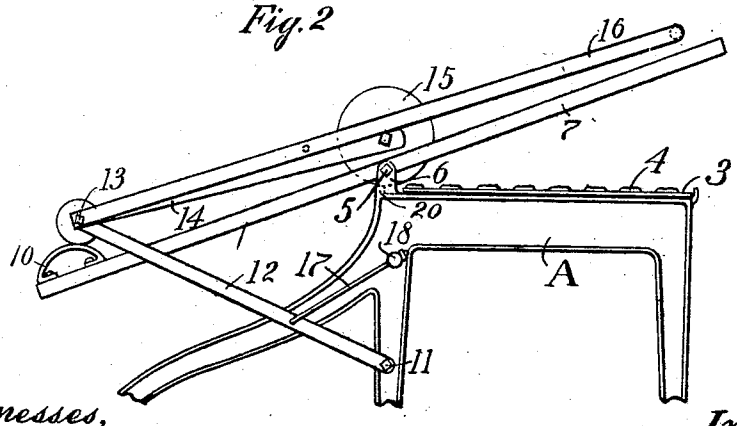


Fig. 2



Witnesses,
George Voelker
Hattie Smith

Inventor,
Andrew S. Cairncross
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his Attorneys.

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Fig. 3

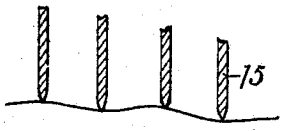
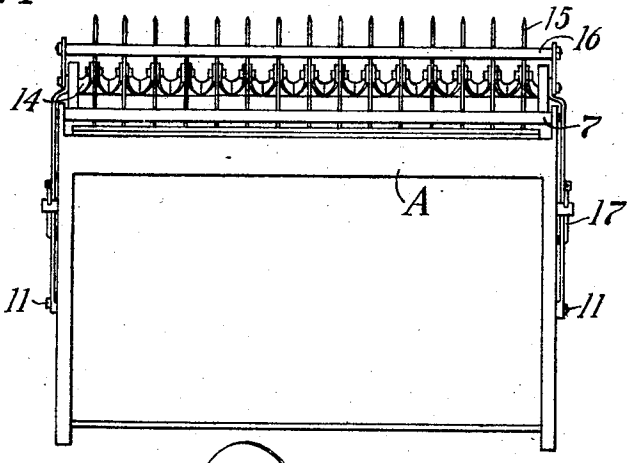


Fig. 4



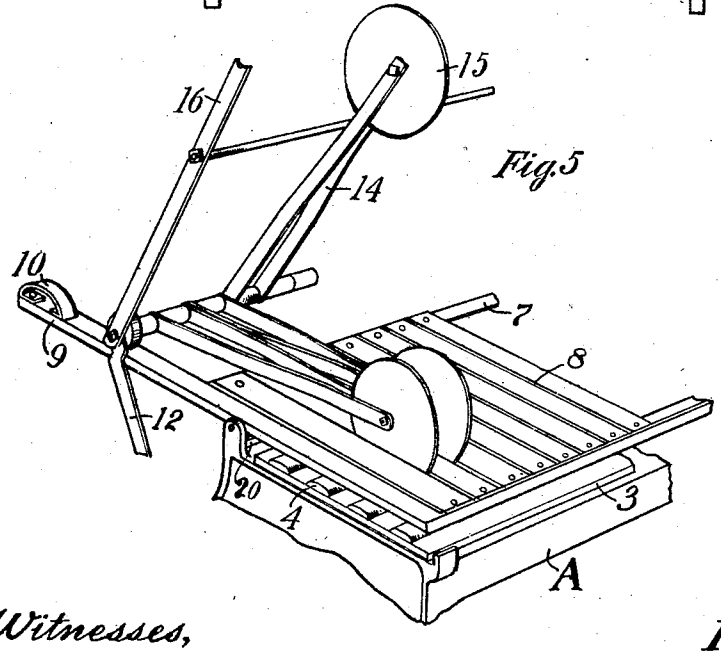


Fig. 5

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UNITED STATES PATENT OFFICE.

ANDREW S. CAIRNCROSS, OF ST. PAUL, MINNESOTA.

MACHINE FOR CUTTING FIG-BARS AND SIMILAR ARTICLES.

No. 869,057. Specification of Letters Patent. Patented Oct. 22, 1907.

Application filed December 10, 1906. Serial No. 347,205.

To all whom it may concern:

Be it known that I, ANDREW S. CAIRNCROSS, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Machines for Cutting Fig-Bars and Similar Articles, of which the following is a specification.

My invention relates to improvements in machines for cutting fig bars and similar articles, and consists particularly in the features of construction and combination hereinafter particularly described and claimed.

In the accompanying drawings forming part of this specification, Figure 1 is a side elevation of my improved machine, Fig. 2 is a similar view enlarged of the parts in operative position, Fig. 3 is a view illustrating the position of the knives in use, Fig. 4 is a front view of my machine, and Fig. 5 is a perspective view partly broken away.

In the drawings A represents the framework of the machine upon the bed 2 of which is adapted to be placed a pan 3 holding the fig bars 4 or other articles to be cut. Having pivotal support 5 in upwardly extending brackets 6 at the rear end of the bed is a frame 7 formed with a series of slots 8 to receive the rotary knives, as hereinafter pointed out. The frame 7 is provided with rearwardly projecting arms 9 carrying at their outer ends upwardly curved cams 10.

Having pivotal support 11 on the sides of the frame work are upwardly extending bars 12. Supported in the upper ends of the bars 12 is a shaft 13 upon which is rotatably mounted a series of arms 14, each arm having journaled in its free end a circular knife 15. Swiveled upon the ends of the shaft 13 is a hand lever 16 extending to the front end of the machine, as shown in Fig. 1. The bars 12 constitute, it will be seen, a swinging carriage for the knives 15, the movement of said carriage being limited by rods 17 connected with the bars 12 and slidable through stops 18. Mounted upon the ends of the shaft 13 are rollers 19 adapted to run upon the side bars of the guide frame 7.

In operation the parts normally stand in the position shown in Fig. 2, the knife carriage being swung rearwardly to bring the rollers 19 into engagement with the cams 10 to swing the guide frame out of contact with the bed of the machine. The pan of fig bars may then be placed upon the machine bed as shown in Fig. 2. The operator may then by means of the handle 16 draw the knife carriage forward. This will first carry the rolls 19 out of contact with the cams 10 allowing the guide frame to drop. As the carriage is then drawn forward the knives will travel in the slots 8 cutting the fig bars. By having the knife supporting arms independently swiveled they will separately follow the inequalities of the pan 3, as indicated in Fig. 3. After the bars are cut and the parts returned to the position shown in Fig. 2 the knives rest upon a cross bar 20, preferably of wood, arranged between the side brackets.

As will be evident, the great advantage of my invention is that the knives will independently follow the plate 3, thus resulting in completely cutting through the fig bars regardless of any inequalities in the bottom of the plate.

1. In a machine of the class described, the combination with a frame-work provided with a tray supporting bed, of a carriage movably supported by said frame-work at the rear of said bed, a series of forwardly extending arms having independent pivotal support in said carriage, and cutting blades supported in the forward ends of said arms.

2. In a machine of the class described, the combination with a frame-work formed with a tray supporting bed, of a guide frame pivotally supported over said bed and formed with a series of parallel slots, a carriage movably supported upon said frame-work in relation to said bed, a reciprocating carriage carried by said frame, a series of arms independently supported in said carriage, and blades carried by said arms in position to travel in said slots.

3. In a machine of the class described, the combination with a frame-work formed with a tray supporting bed, of a guide frame pivotally supported above said bed, and formed with a series of parallel slots, a cam carried by said guide frame at the rear of said bed, a reciprocating carriage arranged in position to engage with said cam to tilt said guide frame, and a series of cutting blades having independent movable support in said carriage in position to travel in said slots.

4. In a machine of the class described, the combination with a frame-work formed with a supporting bed, of a guide frame having pivotal support at the rear of said bed and formed with a series of parallel slots, a cam carried by said guide frame at the rear of said bed, a movably supported carriage arranged in position to engage with said cam and tilt said guide frame, a series of forwardly extending arms having independent pivotal support in said carriage, knives carried by the forward ends of said arms in position to travel in said slots, and means for drawing said carriage forward.

5. In a machine of the class described, the combination with a frame-work formed with a supporting bed, of a guide frame pivotally supported at the rear of said bed and formed with a series of parallel slots, cams carried by said guide frame at the rear of said bed, upwardly extending bars pivotally supported upon the sides of said frame, forwardly extending arms having independent swing support in the upper ends of said bars, means carried by said bars for engaging with said cams, cutting blades mounted in the forward ends of said arms and an actuating handle extending forwardly from the upper ends of said bars.

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

ANDREW S. CAIRNCROSS.

Witnesses:
H. S. JOHNSON,
HATTIE SMITH.