No. 748,125. PATENTED DEC. 29, 1903.

A. WEBER.

BRONZING MACHINE.

APPLICATION FILED MAY 4, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1.

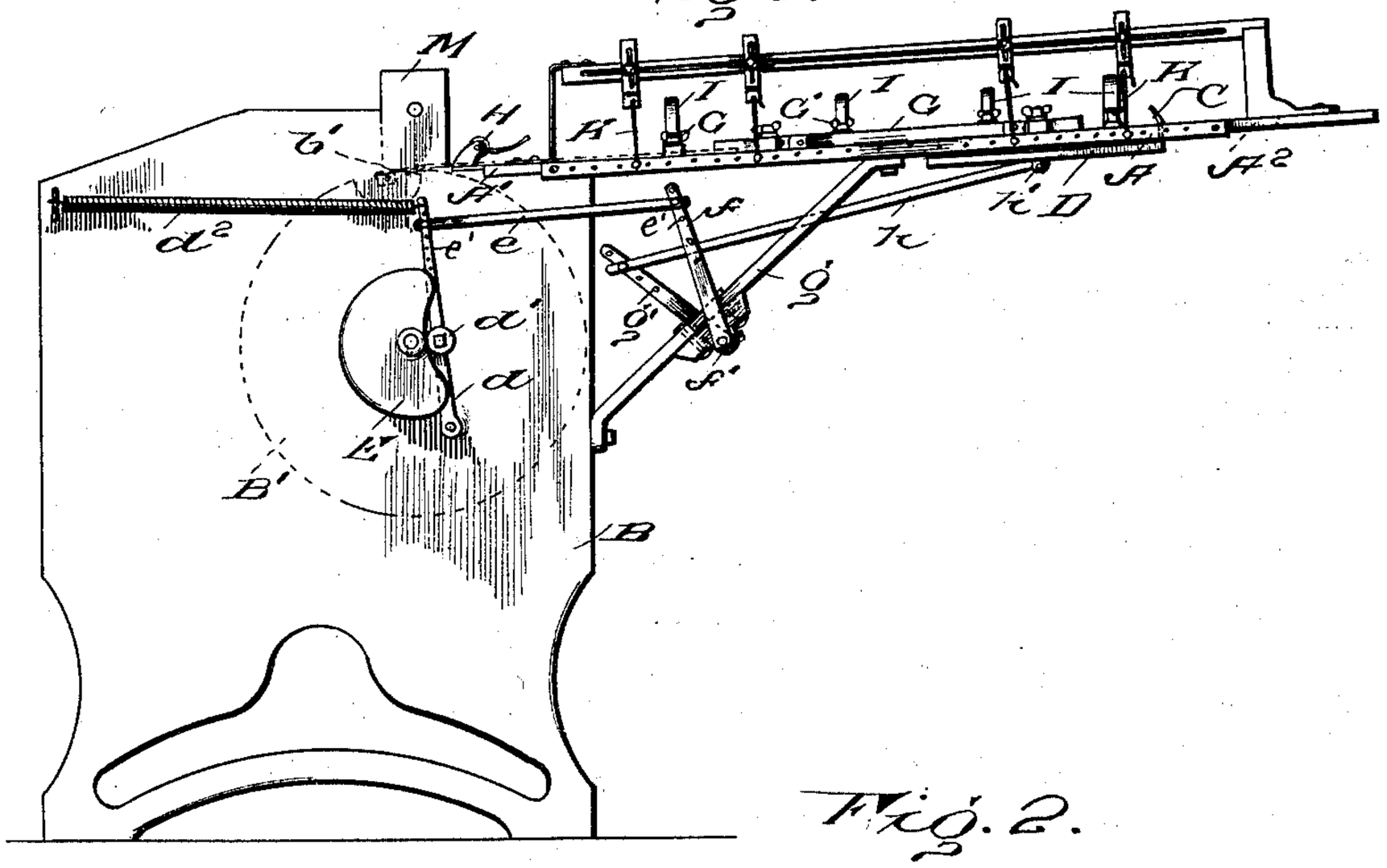

Fig. 2.

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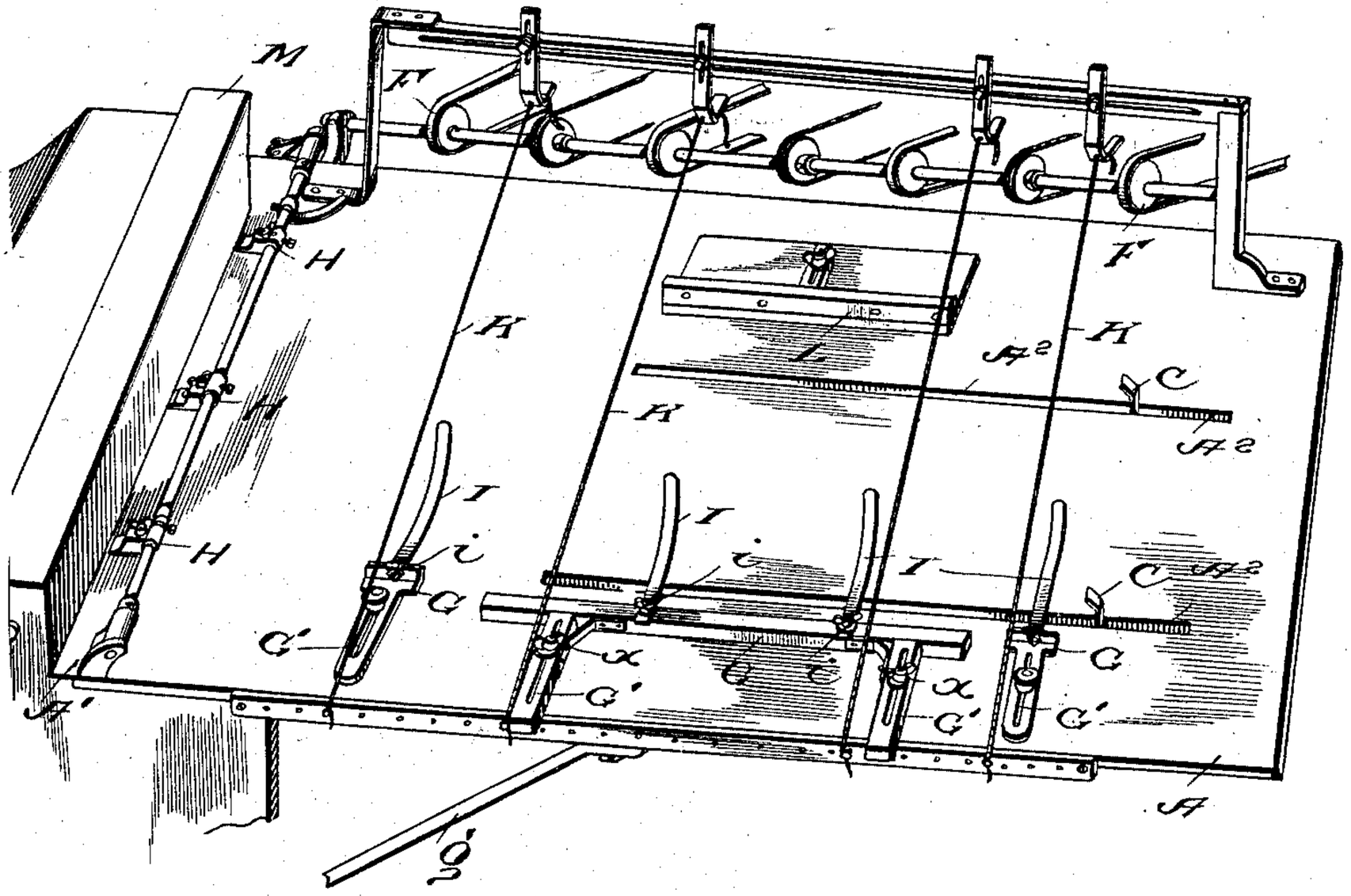
Fig. 3.



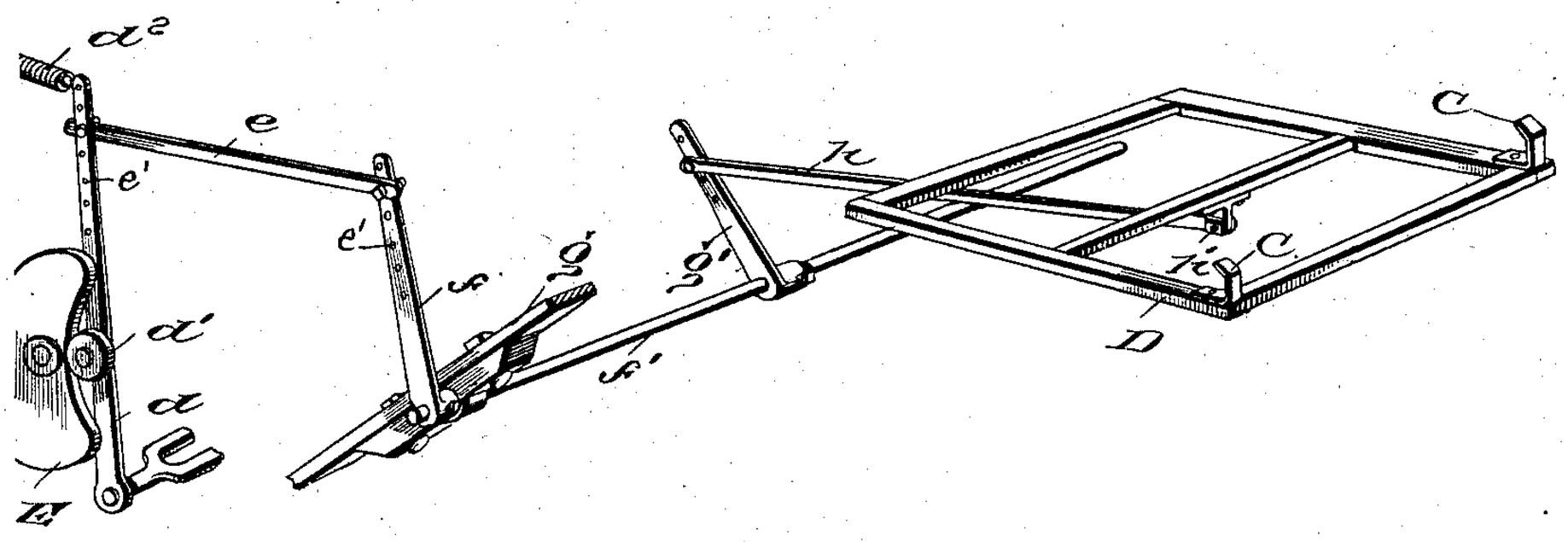


Fig. 4.

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UNITED STATES PATENT OFFICE.

ARTHUR WEBER, OF CHICAGO, ILLINOIS.

BRONZING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 748,125, dated December 29, 1903.

Application filed May 4, 1903. Serial No. 155,574. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR WEBER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Bronzing-Machines, of which the following is a specification.

My invention relates to bronzing-machines, and has for its principal object the provision of a simple, efficient, and inexpensive device for automatically feeding printed paper and other material automatically delivered from a printing-press to said feeding device into the bronzing-machine.

The invention consists in certain novel constructions, combinations, and arrangements of parts hereinafter more fully described and claimed.

The nature, characteristic features, and scope of the invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming a part hereof, wherein—

Figure 1 is a side elevational view illustrating an automatic feeding-machine constructed in accordance with my invention applied to a bronzing-machine. Fig. 2 is a top plan view of the same. Fig. 3 is a perspective view of the feed-table and mechanism. Fig. 4 is a perspective view of the feeding-frame and mechanism for operating it.

Referring to the drawings, A represents a feed-table or superstructure supported in any suitable manner—for instance, by means of the bronzing-machine B itself, as shown in Fig. 1. The said table or superstructure is slightly inclined at its outer end in respect to the top of the bronzing-cylinder B'. A lip or extension A' is provided, which acts to deliver the sheets to be bronzed directly upon the cylinder.

Referring to Figs. 2 and 3, A^2 represents slots or ways extending longitudinally of the table and in parallelism. Projecting through said slots or ways are the feeding hooks or fingers C, carried on a reciprocating carriage or slide-frame D, Fig. 4, located below the table. Means are provided for reciprocating said frame as follows:

Referring to Figs. 1 and 4, E is a cam mounted upon some rotary part of the bronzing-machine—for example, upon the same shaft as the cylinder. *d* represents a pivotal cam-stroke lever, carrying a cam-roller *d'* and under the tension of a spring d^2 to keep its roller in engagement with the cam, said spring acting also to retract the lever when released by the cam. *e* represents a connecting-rod, which connects the cam-lever *d* with a throw-lever *f*, mounted on a rock-shaft *f'*, afforded bearings in brackets *g*, which brackets also serve to support the feed-table. The cam-lever *d* and throw-lever *f* are provided with openings *e'* for purposes of adjustment of the connecting-rod *e* to vary the throw of lever *f*. The rock-shaft *f'* also carries a throw-lever *g'*, adjustably connected to a connecting-rod *h*, which is centrally pivoted to the slide-frame, as at *h'*. It will thus be apparent that when the cam E is rotated its circular part when in contact with the roller *d'* will, through the lever mechanism, above explained, cause the slide-frame D to be retracted, and when the "dead" portion of the cam is in contact with the cam-roller the spring d^2 or its equivalent will retract the cam-stroke lever, and thereby cause the slide-frame to move forward to feed material to the bronzing-machine.

Referring again to Fig. 3, F represents the tape-rollers for conveying the sheets or material to be bronzed to the feed-table. G represents side guides, and H represents front guides, for directing the sheets to the cylinder. I represents overhanging fingers, which may be adjusted, as at *i*, to various angles and the function of which is to force the paper or material to be bronzed down to the level of the feed-board. The side guides are adjustable by means of the slotted blocks G' and clamping-screws *x*. K represents a plurality of tape-lines, which when operating with soft paper prevent a current of air from throwing it from its position on the board. L represents a jogger or guide, which is acted upon by the operator to push the material to be bronzed against the lateral guides G.

In the operation of the machine the sheets of paper or other material to be bronzed are automatically conveyed to the feed-table A from a press, for instance, by means of the tape-rollers F. Here the paper is properly alined by the jogger L, pushing it against the guides G, after which it is engaged by the

fingers C and carried forward to the front guides H, which direct it upon the bronzing-cylinder, the front edge of the paper being engaged by the gripper b' of the cylinder in the usual manner. M represents the bronze-box of the machine, which machine may be of any suitable construction.

It will be obvious to those skilled in the art to which the invention appertains that modifications may be made in details without departing from the spirit and scope of same. Hence I do not limit myself to the precise arrangements of parts and construction hereinabove described; but,

Having thus described the nature and objects of the invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a bronzing-machine the combination of a feed-table having slots lengthwise thereof, a reciprocating carriage beneath said table and having feeding-fingers passing through said slots, a connecting-rod h having one end attached to said carriage and at the other end a throw-lever g', a rock-shaft f' for said lever, a second throw-lever f upon said shaft, a connecting-rod e having one end pivoted to the lever f, a rocking cam-lever d pivoted at one end, and united to the opposite end of the rod e, and a coil-spring d^2 secured also to the end of the cam-lever, with a cam E operating upon the rocking cam-lever d, substantially as described.

2. In a bronzing-machine the combination of a feed-table having slots lengthwise thereof, brackets g for said table, a reciprocating carriage having feeding-fingers through the slots of the table, a rock-shaft mounted upon the brackets g, two throw-levers mounted upon said rock-shaft, each throw-lever having a connecting-rod adjustably mounted thereon, a pivoted rocking cam-lever having its free end adjustably connected with one of the connecting-rods and also attached to one end of a coiled spring, with a cam operating upon the rocking cam-lever substantially as described.

3. In a bronzing-machine the combination of a feed-table having slots lengthwise thereof, guides parallel with said slots and adjustably secured upon the table, brackets for said table, a reciprocating carriage having feeding-fingers passing through the slots of the table, a rock-shaft mounted upon the brackets of the table, two throw-levers mounted upon said rock-shaft, each throw-lever having a connecting-rod adjustably mounted thereon, a pivoted rocking cam-lever having its free end adjustably connected with one of the connecting-rods, and a coil-spring having one end attached also to the free end of the cam-lever, with a cam operating upon the side of the cam-lever, substantially as described.

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

ARTHUR WEBER.

Witnesses:
EDWARD C. SCHWEITZER,
ALBERT G. HUBBARD.