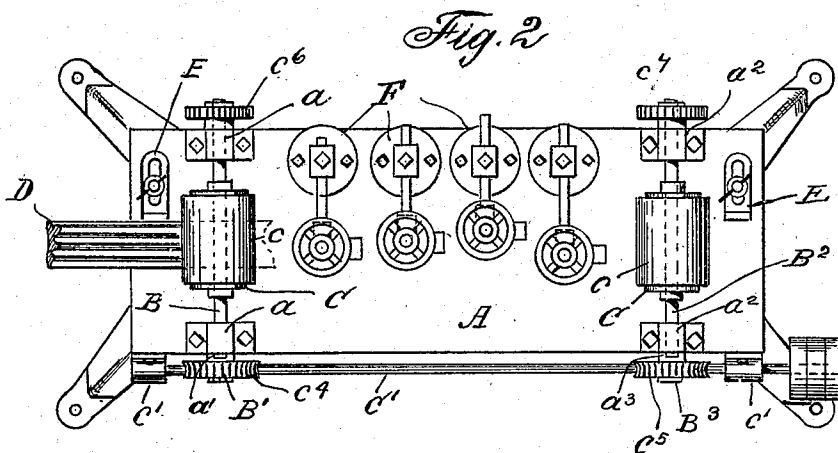
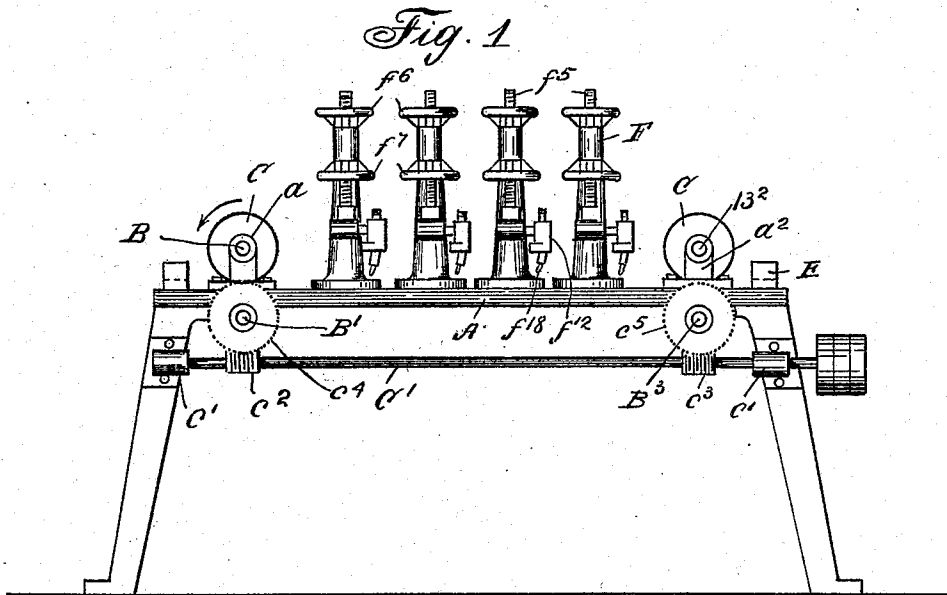


C. KOZISEK.
BURNISHING MACHINE.
APPLICATION FILED MAR. 27, 1908.

937,446.

Patented Oct. 19, 1909.

2 SHEETS—SHEET 1.



WITNESSES
Frank Loeser
H. R. Wingle

INVENTOR
Charles Kozisek
BY Robt. Klotz
Atty.

C. KOZISEK.
BURNISHING MACHINE.
APPLICATION FILED MAR. 27, 1908.

937,446.

Patented Oct. 19, 1909.

2 SHEETS—SHEET 2.

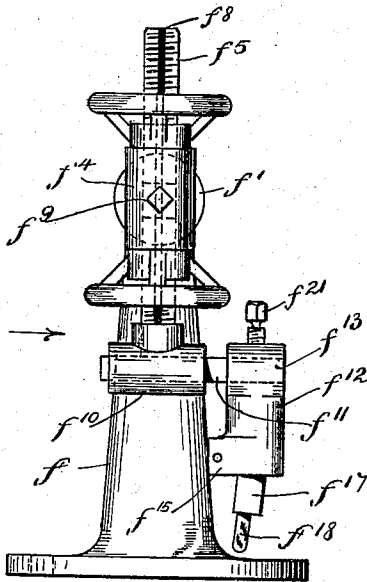


Fig. 3

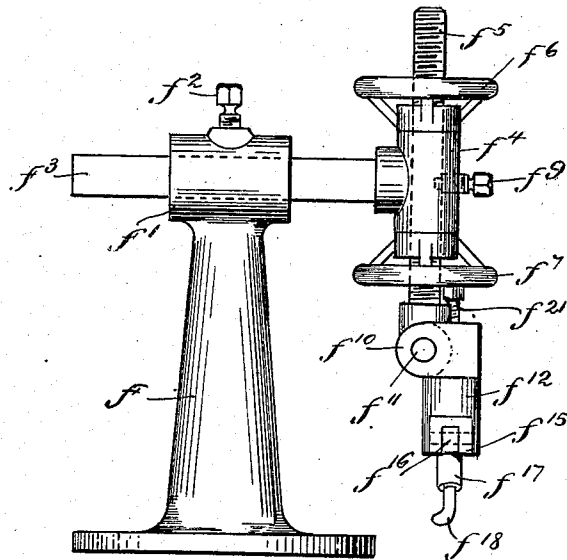


Fig. 4

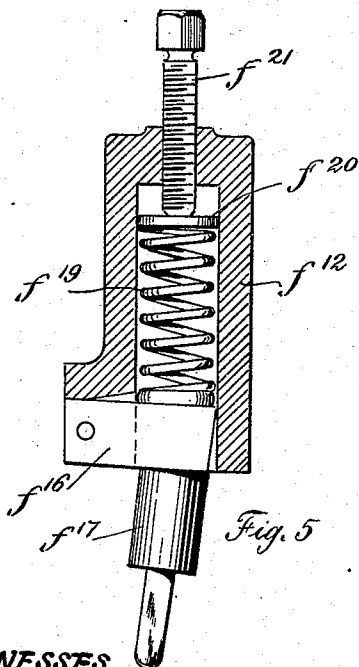


Fig. 5

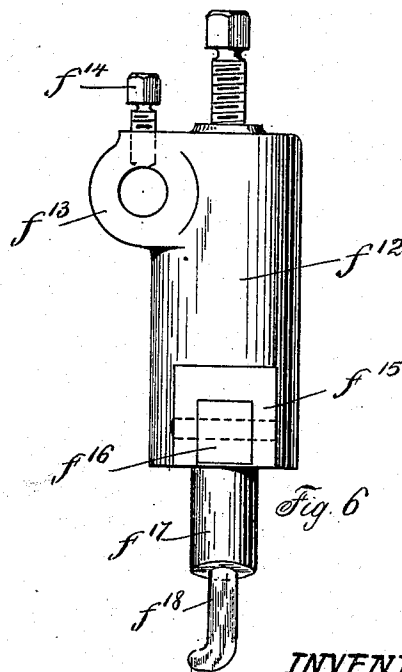


Fig. 6

WITNESSES
Frank Doerer
H. R. Weigle

INVENTOR
Charles Kozisek
By Robt. Klotz
Atty.

UNITED STATES PATENT OFFICE.

CHARLES KOZISEK, OF CHICAGO, ILLINOIS.

BURNISHING-MACHINE.

937,446.

Specification of Letters Patent.

Patented Oct. 19, 1909.

Application filed March 27, 1908. Serial No. 423,637.

To all whom it may concern:

Be it known that I, CHARLES KOZISEK, a citizen of the United States, and residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Burnishing-Machines, of which the following is a complete specification.

This invention relates to improvements in burnishing machines and more particularly to a burnishing machine adapted for burnishing or polishing moldings for picture frames or the like.

The object of this invention is to provide a burnishing machine capable of quickly imparting a high polish to moldings or the like, and which is adapted to be so adjusted that the molding may be burnished over its full width if desired while passing but once through the machine.

It is a further object of the invention to provide a burnishing machine in which the burnishers may be adjusted to a great variety of positions both vertically, laterally and at angles, and in which the burnishers are yieldingly engaged in their supports to enable them to pass over irregularities or inequalities without marring the work, and at the same time exert sufficient pressure to impart the desired polish.

The invention consists of the matters hereinafter described in the specification and more fully pointed out and defined in the appended claims.

In the drawings: Figure 1 is a side elevation of a machine embodying my invention. Fig. 2 is a top plan view of the same. Fig. 3 is an enlarged side elevation of one of the adjustable burnishing tools. Fig. 4 is a front elevation of the same. Fig. 5 is an enlarged vertical section of one of the burnisher housings. Fig. 6 is a front elevation of the same.

As shown in said drawings: A indicates a table of any preferred construction and material which is provided near its forward end with upper and lower bearings indicated by a and a' respectively, and in which are journaled upper and lower shafts B and B'. Near the rear end of said table are upper and lower bearings a^2 and a^3 in which are journaled shafts B² and B³. Upper and lower rollers C are rigidly engaged on said shafts and are covered with rubber or other resilient material c which will not mar the molding D as it passes between the rollers.

Said rollers may be driven in any preferred manner but, as shown, a shaft C' is journaled in suitable bearings c' on the side of the table, and is provided with worms c^2 and c^3 adapted to mesh with worm gears c^4 and c^5 on the shafts B' and B³ respectively. The shafts B and B' are provided on their opposite ends with intermeshing gears c^6 , and the shafts B² and B³ are provided with intermeshing gears c^7 . Said gears act to drive the rollers of each pair oppositely. Guides E are adjustably engaged on the table and are adapted to be set to direct the moldings truly between the rollers and beneath the burnishers. Rigidly engaged on said table in position to operate on the molding as it passes through the machine are a plurality of burnishing tools each herein indicated as a whole by F, and as each is identical with the others a description of one will suffice for all.

Referring now more particularly to the construction of the burnishing tools, f indicates a standard adapted to be rigidly engaged on the table A and is provided with a head f' thereon having a bore or aperture therethrough extending transversely of the table. Adjustably engaged in said head by means of a set screw f^2 is a bar f^3 which extends transversely of the table and is provided on one end with a vertically apertured head f^4 in which is slidably engaged a threaded shaft f^5 . Hand wheels f^6 and f^7 have threaded engagement on the shaft f^5 above and below the head f^4 and act to hold said shaft in adjusted position. A longitudinal groove f^8 is provided in said shaft and a set screw f^9 is engaged in the head f^4 and projects into said groove and holds the shaft from rotation. On the lower end of said shaft is an apertured head f^{10} in which is adjustably engaged an arm f^{11} on which is supported the burnisher carrier. Said carrier comprises, as shown, a housing f^{12} , having at its upper end a transverse sleeve f^{13} adapted to be engaged on the arm f^{11} , and in which a set screw f^{14} is engaged and holds the housing in adjusted position on said arm. Said housing is open at its lower end and is provided adjacent thereto in one side with an opening surrounded by a flange f^{15} . Pivoted in said flange is a member f^{16} which extends into the housing and is provided on its inner end with a downwardly directed socket f^{17} which projects from the bottom of the housing and in which is en-

gaged the burnisher f^{18} of any preferred material and shape. Within said housing is a coiled spring f^{19} which bears at its lower end on the inner end of the member f^{16} and on its upper end is a plate f^{20} adapted to be engaged by a set screw f^{21} extending downwardly through the top of the housing, and by means of which the tension of the burnisher on the work is regulated.

10 The operation is as follows: The burnishing tools F are adjusted transversely of the table by means of the bars f^a to bring the burnishers at varying distances from the standards so that one will not travel in the path of the others. The carriers are ad-

15 justed on their arms f^{11} to hold the burnishers at the desired angles and the tension of the burnishers on the work is regulated by the set screws f^{21} . When the proper adjustments of the burnishing tools have been made the molding is fed into the rollers and is passed thereby beneath the burnishers, each of which conforms to a portion of the cross-sectional contour of the

25 molding. Inasmuch as the burnishers bear with a yielding pressure on the molding it is obvious that they will not mar it, and obviously also any desired number of burnishers may be employed in the machine and

30 they may be arranged in any preferred manner; and many details of form and construc-

tion may be varied without departing from the principles of my invention.

I claim as my invention:

1. In a device of the class described the combination with a horizontal arm, of a housing having a laterally disposed, transverse, cylindrical sleeve on the upper end thereof, means adapted to adjustably secure said sleeve on said arm and secure the housing at the desired angle to the perpendicular, and a tool yieldingly secured in the lower end of said housing.

2. In a device of the class described the combination with a housing of a laterally offset, transverse, cylindrical sleeve at the upper end thereof, a horizontal arm projecting into said sleeve, and adapting the sleeve to be rotated thereon to adjust the housing to a desired angle to the perpendicular, a set screw in said sleeve adapted to engage said arm and hold the housing in adjusted position and a tool yieldingly secured in the lower end of said housing.

In testimony whereof I have hereunto subscribed my name in the presence of two witnesses.

CHARLES KOZISEK.

Witnesses:

H. R. WEIGLE,
C. A. STRATTON.