

No. 799,389.

PATENTED SEPT. 12, 1905.

H. G. KRASKY.  
FRICTION GRAINING MACHINE.

APPLICATION FILED FEB. 1, 1905.

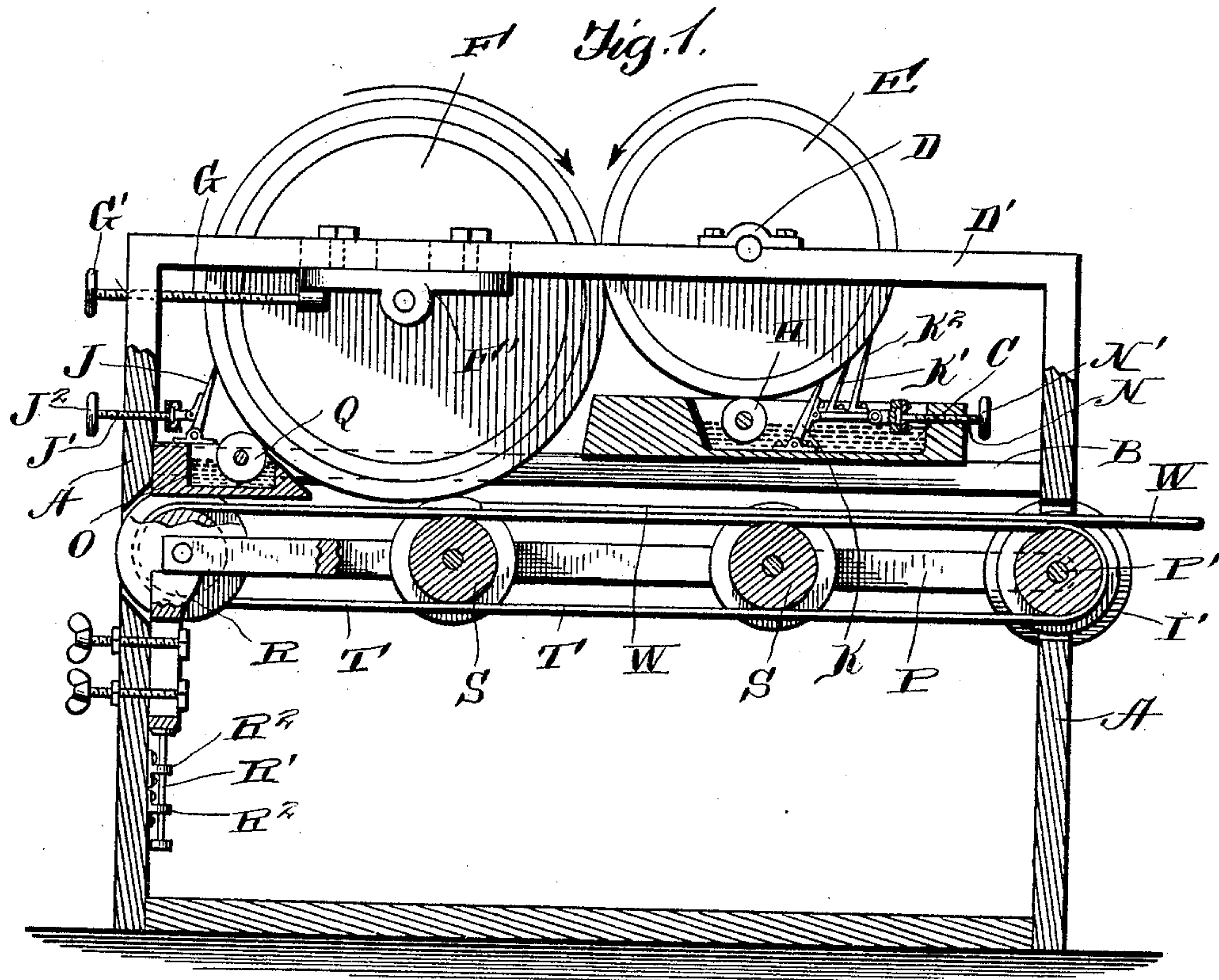
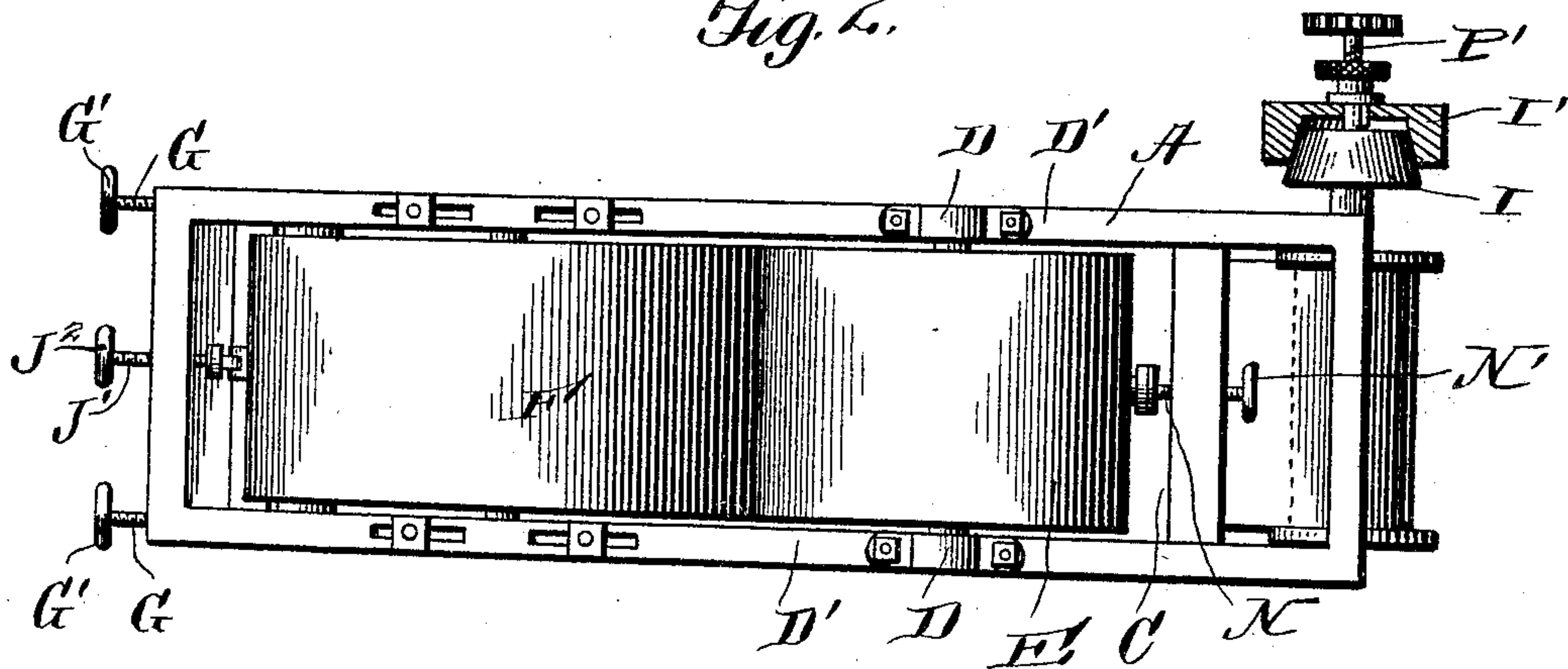


Fig. 2.



Witnesses

R. A. Boswell  
a. L. Hough

Inventor  
Henry G. Krasky,  
By Franklin H. Hough  
Attorney



# UNITED STATES PATENT OFFICE.

HENRY GUSTAVE KRASKY, OF SAN FRANCISCO, CALIFORNIA.

## FRICTION GRAINING-MACHINE.

No. 799,389.

Specification of Letters Patent.

Patented Sept. 12, 1905.

Application filed February 1, 1905. Serial No. 243,734.

*To all whom it may concern:*

Be it known that I, HENRY GUSTAVE KRASKY, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Friction Graining-Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in printing apparatus, and especially in a friction graining-machine designed for the purpose of reproducing accurately the grain or print from a board; and it consists in various details of construction and in combinations and arrangements of parts, which will be hereinafter fully described and then specifically defined in the appended claims.

My invention is illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which—

Figure 1 is a longitudinal vertical section through my improved apparatus, and Fig. 2 is a top plan view.

Reference now being had to the details of the drawings by letter, A designates the frame of the apparatus, having a platform B positioned at any suitable location and adapted to support an ink-pan C. Mounted in suitable bearings D upon the top pieces D' of the frame is a roller E, upon the surface of which is the design for the grain to be transferred to the surface of the composition roller F, preparatory to its retransfer to the surface of an object. Said composition roller F is mounted in bearings F', which are adjustably mounted upon the upper cross-pieces of the frame, whereby the frictional contact between the surfaces of the two rollers may be regulated by means of a rod G, having a hand-wheel G' at one end thereof. Mounted in suitable bearings underneath the roller E is an ink-roller H, which turns in contact with the roller E and turns in the tray or pan C, which is adapted to contain ink. In order to spread the ink evenly over the surface of the roller E, the scrapers K, K', and K<sup>2</sup> are provided, the scraper K being pivotally mounted in the bottom of the pan, while the scrapers K' and K<sup>2</sup> are fixed to a rod N, having a hand-wheel N'

at the outer end thereof, whereby as a longitudinal movement is imparted to the rod N the spreaders may be made to frictionally engage the surface of the roller with more or less pressure, as desired. In order to clean the composition roller, I provide a cleaning-tank O, mounted upon the frame, which is adapted to contain a cleansing fluid, and mounted in said tank is a roller Q, which turns in said tank and also in contact with the circumference of the composition roller, thereby moistening the surface of the same as the composition roller rotates. A scraper J is pivotally mounted within said tank and is adapted to frictionally bear against the surface of the roller F and is adjusted by means of a rod J', having a hand-wheel J<sup>2</sup> at the end thereof. Mounted underneath said rollers is a rack P, pivotally mounted at one end upon a shaft P', and the opposite end of said rack is mounted upon an adjusting-block R, which has a screw R' fastened to its lower end, and the threaded portion of said screw passes through the threaded apertures in the brackets R<sup>2</sup>, mounted on the side of the frame, whereby as said screw is turned by means of the hand-wheel at the lower end thereof said block may be raised or lowered for the purpose of raising or lowering one end of said rack. Mounted upon said rack are the flanged reels S, and T designates an endless carrier which passes over said reels and upon which endless carrier the article W, upon the surface of which the graining is to be transferred, is carried.

In order to drive the endless carrier, I provide a friction-wheel I, mounted upon the shaft P', and a friction clutch-block I' is provided, which is splined to the shaft P' and is provided with a recess upon its inner face, the marginal outline of said recess being adapted to frictionally engage the inclined circumference of the friction-wheel I, whereby motion may be imparted to the carrier.

By the provision of the apparatus shown and described motion is imparted to the apparatus by the frictional contact of the surface of the composition roller with the moving carrier, and by the provision of the scrapers bearing against the roller E ink will be evenly distributed, and by the provision of the adjustable rack the pressure intermediate the transferring-roller F and the article to which the graining is to be transferred may be easily and quickly adjusted, and also the frictional pressure intermediate the two roll-



ers E and F may be conveniently adjusted by the apparatus illustrated.

It will be observed that any design, as the graining of wood or other objects appearing upon the surface of the roller E, may be readily transferred to the composition roller preparatory to its retransfer to the surface of any article mounted upon the carrier.

While I have shown a particular form of apparatus illustrating my invention, it will be understood that I may vary the details of the same, if desired, without in any way departing from the spirit of the invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A friction graining-machine comprising a frame, a composition roller adjustably mounted upon said frame, a design-carrying roller mounted in suitable bearings upon the frame, an ink-receptacle, an ink-spreading roller mounted therein and adapted to bear against said design-carrying roller, spreaders, and means for adjusting the same against the circumference of said design-carrying roller, a rack pivoted at one end upon said frame, a vertically-movable block mounted at the other

end of the rack and upon which the latter rests, as set forth.

2. A friction graining-machine comprising a frame, a composition roller adjustably mounted upon said frame, a design-carrying roller mounted in suitable bearings upon the frame, an ink-receptacle, an ink-spreading roller mounted therein and adapted to bear against said design-carrying roller, spreaders, and means for adjusting the same against the circumference of said design-carrying roller, a rack pivoted at one end upon said frame, a block upon which the free end of said rack is mounted, a screw swiveled to said block, brackets having threaded apertures through which the threaded portion of said screw passes, whereby the block may be raised and lowered, a cleaning-roller and tank in which the same is mounted, and an adjustable scraper held against the surface of said composition roller, as set forth.

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

HENRY GUSTAVE KRASKY.

Witnesses:

FRED A. TAYLOR,  
A. L. BALLOU.