

(No Model.)

M. FINK.
METHOD OF ORNAMENTING GLASS.

No. 384,569.

Patented June 12, 1888.

Fig. 1.

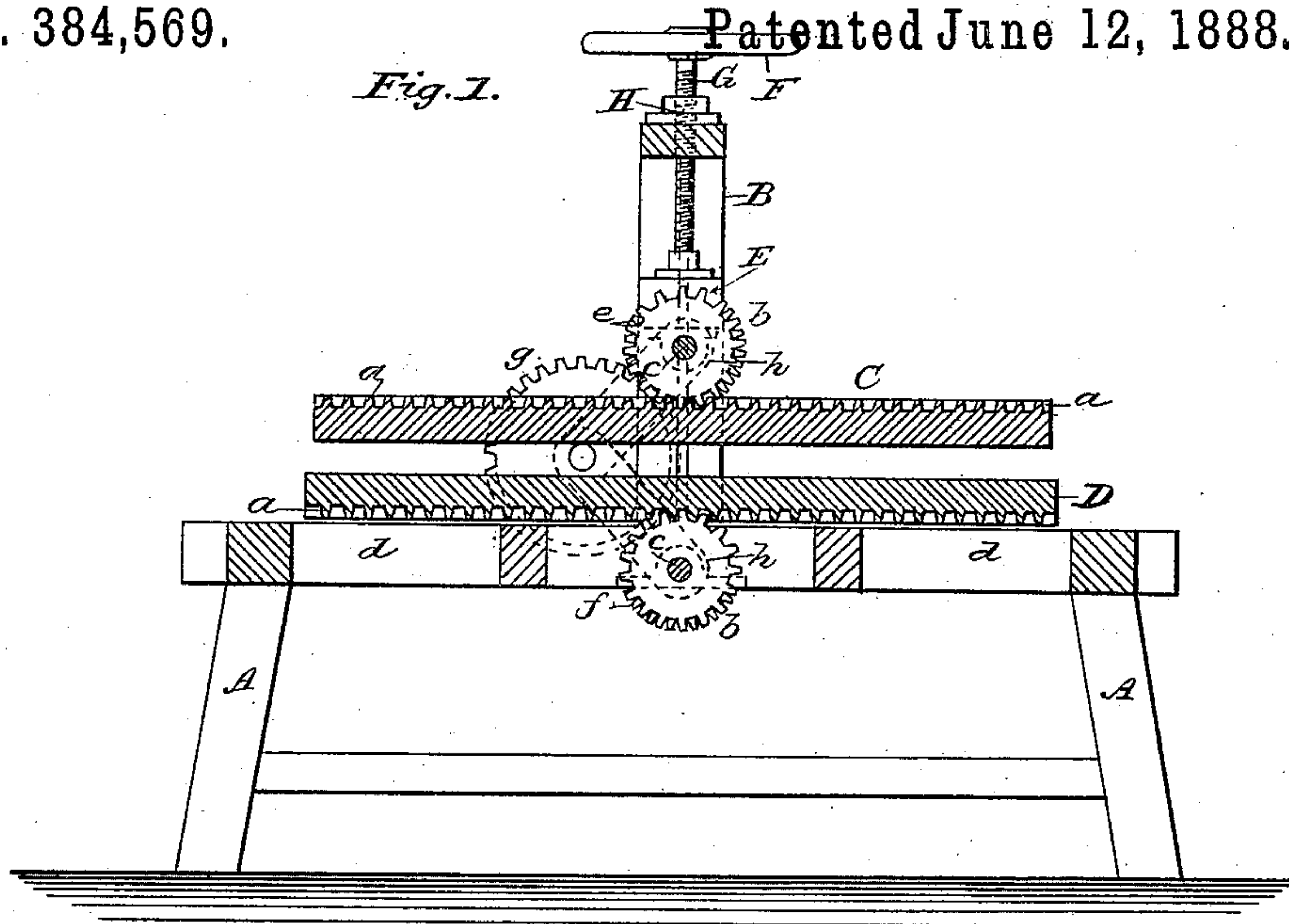


Fig. 2.

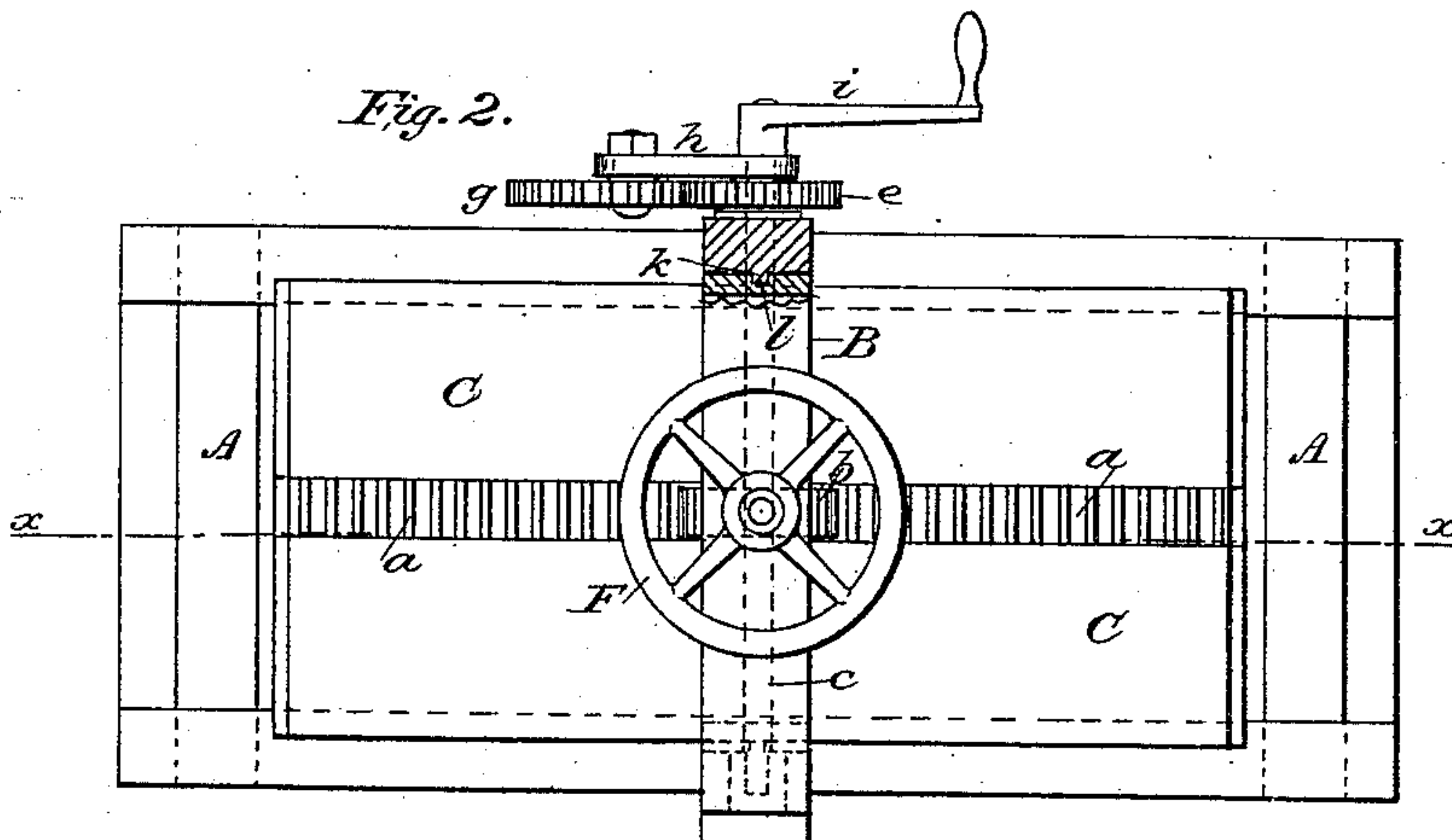
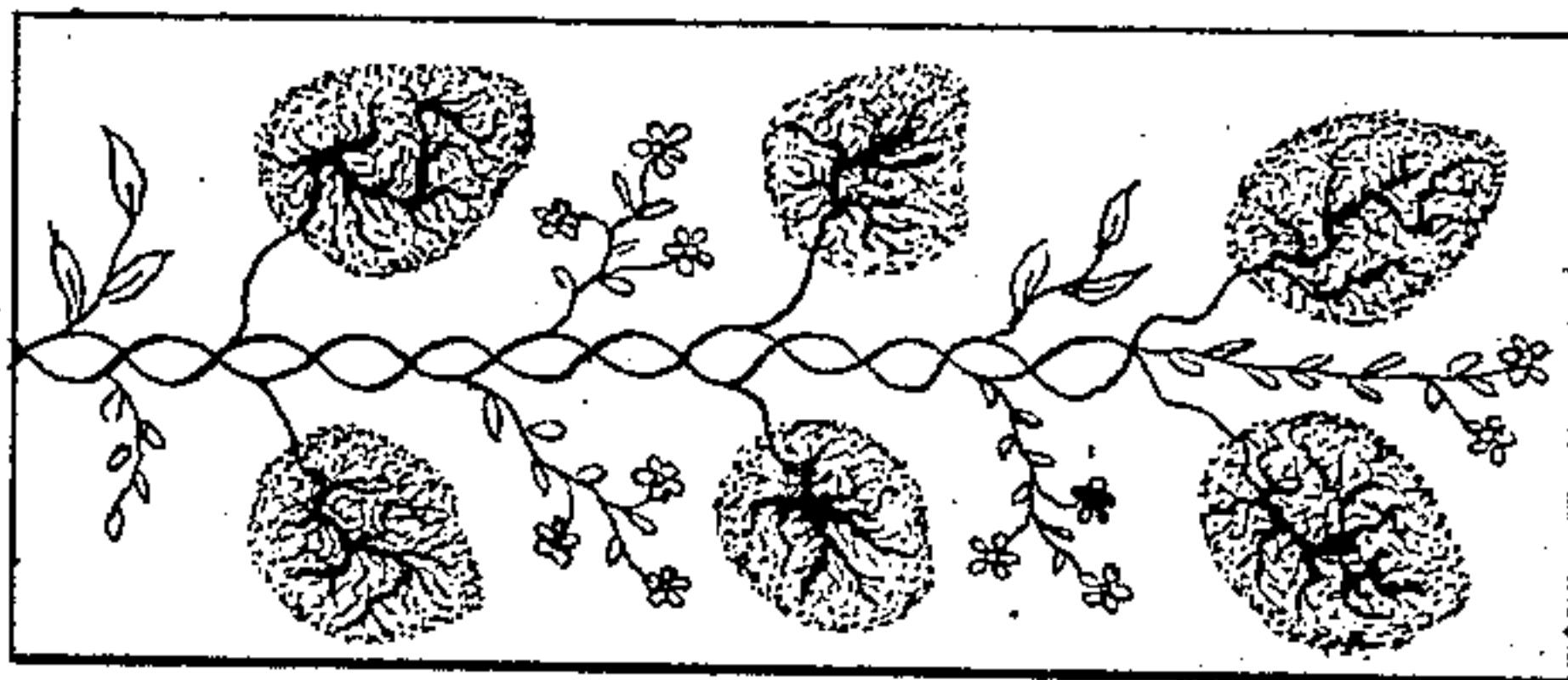


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

MARX FINK, OF PITTSBURG, PENNSYLVANIA.

METHOD OF ORNAMENTING GLASS.

SPECIFICATION forming part of Letters Patent No. 384,569, dated June 12, 1888.

Application filed October 3, 1887. Serial No. 251,316. (No model.)

To all whom it may concern:

Be it known that I, MARX FINK, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in the Method of Ornamenting Glass; and I do hereby 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.

My invention relates to improvements in the method and apparatus for ornamenting glass plates or their equivalent; and the object of the invention is to impart a neat and ornamental appearance to glass of any kind to be used for picture-frames, different kinds of furniture, parts of buildings, such as mantels, doors, windows, cornices, dados, counters, or other parts to which it is desired to give an ornamental appearance; also, to produce this ornamentation by unskilled persons, not artists, it requiring merely any desired colors, to be applied by a piece of pointed wood or its equivalent, of any design or pattern; also, to produce such ornamentation in a durable manner, so that the articles upon which it is applied can be washed without obliteration; and, finally, to produce such ornamentation in a very expeditious manner with ordinary or common paints or colors.

The invention consists in an improved method for producing regular or irregular ornamentation resembling fruit, flowers, animals, leaves, birds, fish, or other desired objects or devices, upon glass or its equivalent, metal, or other material, said glass being plain, stained, or painted, and of any size or configuration, by applying oil-paints of any desired colors and of any design in a rough manner to plates of glass or other material.

It also consists of certain details of construction and arrangement of parts of an apparatus for applying such ornaments to plates of glass or other material, all of which will be more fully described hereinafter, and specifically pointed out in the claims, reference being had to the accompanying drawings and the letters of reference marked thereon.

Like letters indicate similar parts in the different figures of the drawings, in which—

Figure 1 represents a longitudinal section of an apparatus for applying the ornamentation to one or more plates with paints. Fig. 2 is a plan of the same, partly in section. Fig. 3 is part of a plate ornamented.

In the drawings, A represents a suitable frame for plates of considerable size to be ornamented, having a central auxiliary frame, B, for supporting the upper platen, C. The lower platen, D, is supported on friction rollers *d*, mounted in the frame A, and both the upper and lower platens are provided on their rear sides with a rack, *a*, with which a gear-wheel, *b*, engages, and as they are revolved move the platens backward and forward.

On the ends of the shafts *c*, upon which these wheels are fastened, the gear-wheels *e* and *f* are secured, and an idler-wheel, *g*, mounted in the ends of the two links *h*, imparts motion to them by the medium of the crank-handle *i*. Instead of this a pulley may be used if the apparatus is to be driven by machine-power instead of hand-power. The faces of the platens may be faced with leather, rubber, or similar material to prevent the plates, if of glass or similar material, from becoming broken or cracked. In the sides of the auxiliary frame is formed a groove, *k*, into which the tongue *l* of cross-piece E fits, and can be moved up and down by turning the hand-wheel F, secured on the end of the screw G. This screw fits in a female thread in the cross-piece H of the auxiliary frame. In case a number of plates are laid upon each other the upper platen is adjusted by said screw and its hand-wheel, and the pressure can be thus regulated as desired. The links *h* permit the platens to be moved freely up and down, while the idler-wheel imparts the motion to the gear-wheels and the said platens.

I do not, however, wish to be understood as confining myself to this particular apparatus, as many devices would suggest themselves to the mechanic for carrying out my invention—such, for instance, as the ordinary clothes-wringer rolls, which can be used for narrow plates, such as are suitable for picture-frames, &c.

The size and width of the rollers, as well as the entire apparatus, can be varied according to the size and width of the plates, which may

be of metal, wood, or any other suitable material, and according to the character of the work for which it is intended.

5 The paints—preferably oil paints of any desired color—are applied to a plate of any desired configuration with a pointed stick, which is preferable to brushes, excepting it is desired to first apply a ground or first coat of any color, and a second plate is then placed upon the first.
10 If desired, any number of plates can thus be placed on each other. They are then placed between the platens or rollers and motion imparted to them, and when pressure is applied to them the paint is squeezed onto the plain
15 plates, and beautiful designs thus produced, which are of the most varied kind and form, and, if desired, small lines representing stems, small flowers, &c., can be traced between the main figures with a pen or in other suitable
20 manner.

The main or principal figures will of course assume the form of the general or first configuration given to them, such as strawberries, stars, squares, circles, animals, or any other
25 conceivable device or design.

To prevent the ornaments being obliterated

or washed off, they may be burned into the glass in the usual way, or affixed in any other suitable manner.

Having thus described my invention, what I claim is— 30

1. The method herein described of ornamenting glass, metal, &c., consisting in first applying to a plate any suitable design with paint in a rough manner, then placing another
35 plate upon it, next applying pressure to them, and finally affixing the ornamentation to the plates, as specified.

2. The mode of ornamenting glass, &c., herein described, consisting in first applying
40 to the plate a suitable design in a rough manner with paint, then placing another plate upon it, and then applying pressure to them by reciprocating platens or rollers, in the manner and for the purpose set forth. 45

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

MARX FINK.

Witnesses:

JOSEPH P. CENTNER,
J. ORTH.