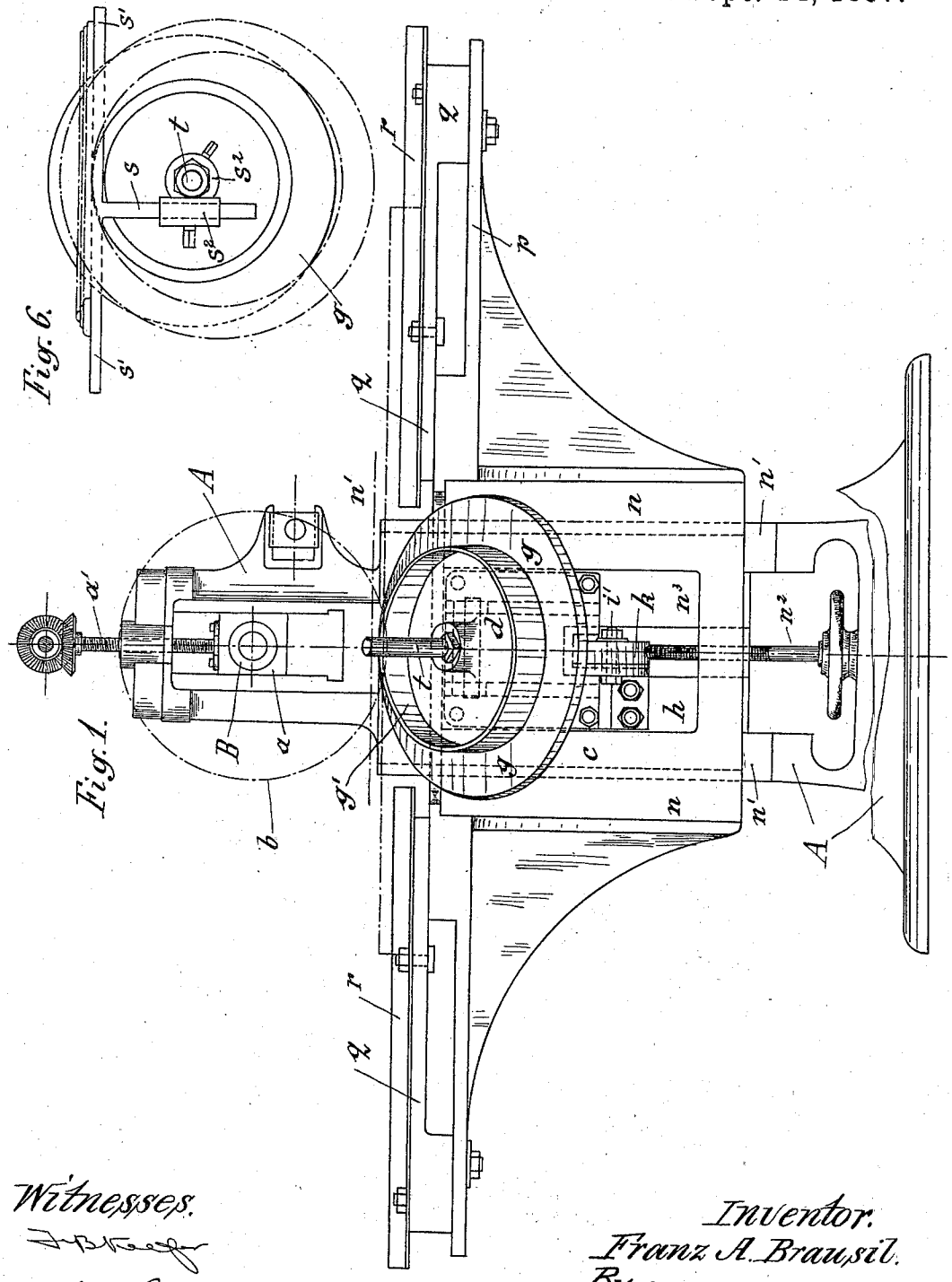
(No Model.) 2 Sheets—Sheet 1.

# F. A. BRAUSIL.

## APPARATUS FOR ORNAMENTING STRIPS OR FRAMES OF WOOD, &c.

No. 590,200. Patented Sept. 14, 1897.




Witnesses.
Robt Ewett

Inventor.
Franz A. Brausil.
By James L. Norris.
Atty.

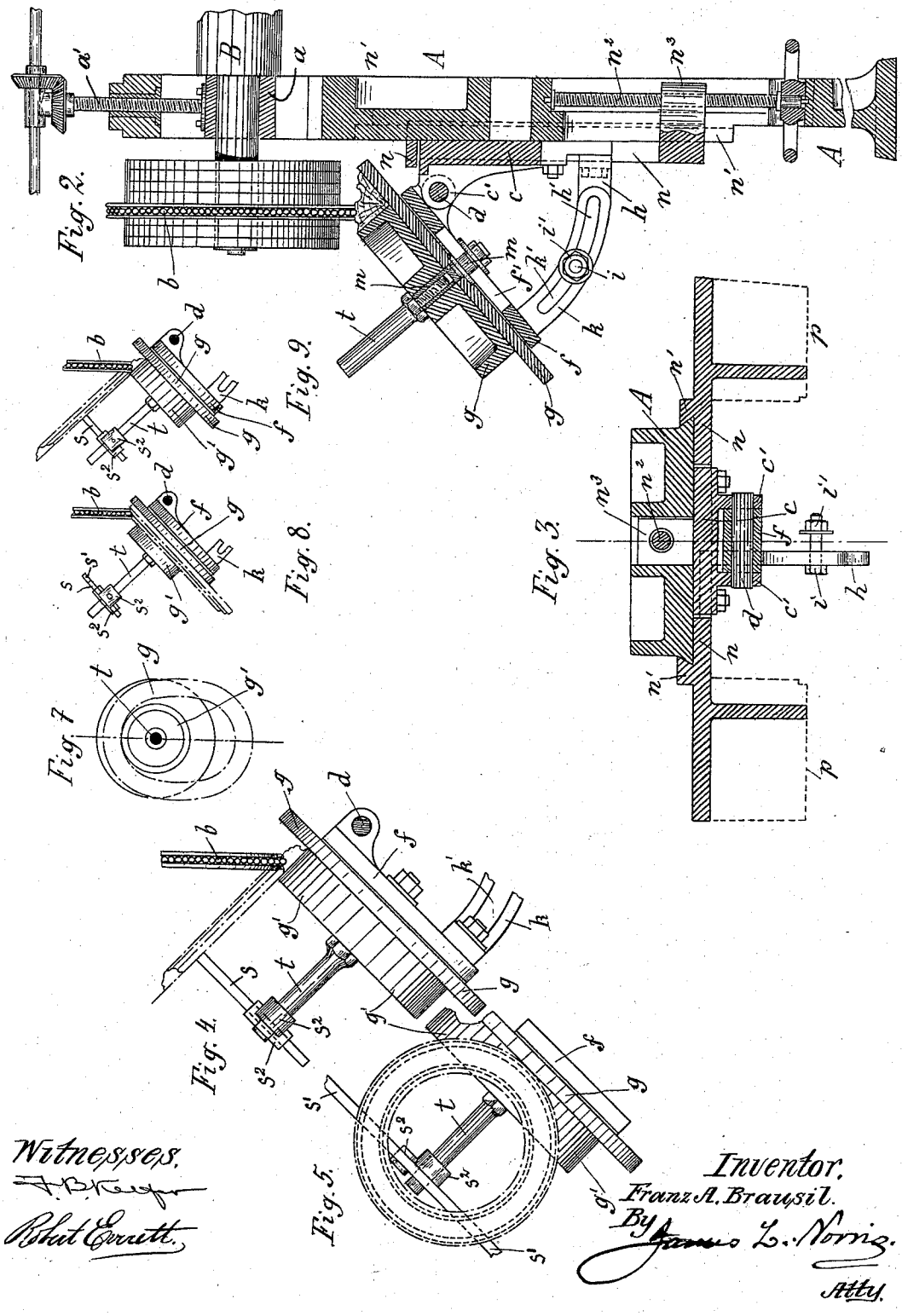
THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

(No Model.) 2 Sheets—Sheet 2.

# F. A. BRAUSIL.

## APPARATUS FOR ORNAMENTING STRIPS OR FRAMES OF WOOD, &c.

No. 590,200. Patented Sept. 14, 1897.




Witnesses.
A. B. Taylor
Robt. Everett.

Inventor.
Franz A. Brausil.
By James L. Norris.
Atty.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

FRANZ ALOIS BRAUSIL, OF VIENNA, AUSTRIA-HUNGARY.

## APPARATUS FOR ORNAMENTING STRIPS OR FRAMES OF WOOD, &c.

SPECIFICATION forming part of Letters Patent No. 590,200, dated September 14, 1897.

Application filed December 19, 1896. Serial No. 616,283. (No model.) Patented in Hungary September 19, 1896, No. 9,343; in Austria September 30, 1896, No. 46/3,803; in Italy November 2, 1896, No. 43,047/268; in England November 5, 1896, No. 24,803; in Belgium November 12, 1896, No. 124,720; in Germany November 27, 1896, No. 19,835; in France January 4, 1897, No. 262,766, and in Switzerland January 7, 1897, No. 13,052.

*To all whom it may concern:*

Be it known that I, FRANZ ALOIS BRAUSIL, artistic joiner, a subject of the Emperor of Austria-Hungary, residing at VII Mariahilferstrasse 126, Vienna, in the Province of Austria, in the Empire of Austria-Hungary, have invented certain new and useful Improvements in An Improved Apparatus for Ornamenting Strips or Frames of Wood and the Like Material, (for which I have obtained Letters Patent in France, dated January 4, 1897, No. 262,766; in Italy, dated November 2, 1896, No. 43,047/268; in Switzerland, dated January 7, 1897, No. 13,052; in Belgium, dated November 12, 1896, No. 124,720; in Germany, dated November 27, 1896, No. 19,835 1/38ª; in Great Britain, dated November 5, 1896, No. 24,803; in Austria, dated September 30, 1896, No. 46/3,803, and in Hungary, dated September 19, 1896, No. 9,343;) 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to an improved machine for ornamenting or decorating lengths or strips as well as circular or other curved pieces or frames of wood or the like material by a simple pressing operation.

A machine of this kind is illustrated in the accompanying drawings, in which—

Figure 1 is a side view, Fig. 2 is a vertical transverse section, and Fig. 3 a horizontal section thereof, the driving-pulleys and the second pedestal or standard being omitted. Fig. 4 is a side view; Fig. 5, a plan, and Fig. 6 a view parallel with the face of the pressing-table or guide-roller and showing a circular frame thereon in position to be ornamented. Fig. 7 is a plan and Fig. 8 a side view of the table and guide-roller and an oval frame placed in position ready for being pressed at its outer side; and Fig. 9 is a similar side elevation, but showing the frame in a position ready for being pressed at its inner side.

The apparatus substantially comprises two principal parts, viz: first, the pressing-roller or ring with its bearing and actuating mechanism, and, second, the lower guide-roller and pressing-table with adjusting device and feed-table, the latter being only used when impressing longitudinal strips of wood or the like.

In the top part of a frame formed by two properly-stayed pedestals A (of which only one is shown) is arranged a bearing *a*, adjustable by means of screw-spindles *a'*, and the pressing-roller shaft B, located upon this bearing, carries upon its free extremity the pressing-roller or ring *b*, provided with the intaglio or opposite of the design to be pressed on the blank.

Below the pressing-ring *b* (or pressing-roller, as the case may be) the pressing-table and guide-roller are arranged so as to be adjustable according to the cross-sectional dimensions of the blank to be pressed, and also according to the place where the design or pattern is to be pressed into the said blank. The guide-roller consists of a disk *g*, forming the edge of the roller, and a ring *g'*, smaller in diameter than the said disk. The blank to be impressed is guided and supported in the angle formed by the said roller and disk while being impressed. This roller is rotatably mounted upon a bolt *m* and bears against a plate or table *f*, which, by means of a swivel-joint *c' d*, is arranged on a supporting-plate *c*, mounted on the pedestal A.

From the supporting-plate *c* toward the plate *f* a curved arm *h* extends, and from the plate *f* another curved arm *k* extends toward the said supporting-plate *c*, both of which arms have the pivot *d* of the swivel-joint as their common center. These arms are adjacent to one another and are each provided with longitudinal slots *h'* and *k'*, respectively, which are parallel to one another and through both of which passes a screw-bolt *i*, having a screw-nut *i'*. This arrangement allows the plate *f* to be adjusted to any required angle of inclination relatively to the supporting-plate *c* or to the pedestal A, according to the shape and size of the blank to be pressed. After simply loosening the nut *i'* the plate *f*

is turned about the hinge $c'$ $d$ until it has reached the proper angle of inclination, whereupon it is fixed in this position by screwing the nut tightly upon the bolt $i'$ and thereby forcing the two arms $h$ and $k$ together.

The guide-roller $g$ $g'$ may, if desired, be made in one piece instead of in two parts, as shown in the drawings, the lower part consisting of a simple flat disk $g$, upon which the second part, having the shape of a ring $g'$, is mounted upon a bolt $m$, so as to be rotatable about the latter independently of the disk $g$ and so that the cylindrical peripheral surface of the said ring is perpendicular to the said disk $g$.

The outer peripheral surface of the ring, together with that portion of the disk $g$ projecting beyond the said peripheral surface of the ring, constitute the necessary support for the blank to be pressed, irrespective of whether this blank be of straight, circular, oval, (elliptical,) or other shape.

The portions $g$ $g'$ are adjustable, together with their bolt $m$, in a slot $f'$ of the plate $f$, and are consequently capable of being either approached toward the pressing-roller or removed therefrom, so that the blank to be pressed can be exactly adjusted relatively to the pressing-ring $b$.

If frames are required to be pressed the guide-roller alone is sufficient, whereas for pressing longitudinal blanks a feed-table is required in addition. Such feed-table may be constructed in any suitable way, and the accompanying drawings merely represent an example, according to which such feed-table consists of a carriage $n$, capable of sliding upon guides $n'$ $n'$ of the pedestal A and vertically adjustable by a screw-bolt $n^2$ and nut $n^3$, which carriage is at each side of the pedestal A provided with suitable extending guide-tables $p$ $p$, upon each of which a plate $q$ $q$ is arranged, adjustable longitudinally. Each table is also provided with adjustable angular rails $r$ $r$. During the pressing operation a special feeding device for the blank is not required, since those parts of the pressing-ring which have been forced into the wooden blank will automatically move the latter forward as the rotary motion proceeds. Lateral displacement need not be apprehended, because the blank to be pressed is, owing to the pressure of the pressing-ring, continuously and firmly forced into the angular recess formed by the disk $g$ and the ring $g'$.

Figs. 1 to 3 represent the method of pressing longitudinal blanks, and Figs. 4 to 9 illustrate the operation of pressing circular, oval, (elliptical,) and other curved blanks or frames.

When the sides of a frame-blank are to be provided with ornaments by means of this pressing-machine, the frame is so placed on the guide-ring $g'$, properly adjusted to the required angle, that its rear surface will rest upon the portion $g$ projecting beyond the ring $g'$, while the ring $g'$ itself projects through the opening of the frame and thus supports the latter at its inner side.

By the pressure of the pressing-ring the frame is continuously forced into the angular recess formed by the parts $g$ and $g'$ and is at the same time moved forward—that is to say, rotated as the pressing operation proceeds by the action of the pressing-ring, whose ornamenting surface enters the blank. In most cases, however, the frame-blanks are required to be ornamented at the inner front side as well as at the outer front side, and when this internal ornamentation is to be effected by this machine the frame must occupy an approximately vertical position as compared with its position when being pressed on its outer side. In order that this position may be maintained, a longer shaft $t$ is mounted upon the bolt $m$ of the pressing-table, and upon this shaft $t$ a rod S, provided with transverse arms S' S', is fixed by means of a double socket $S^2$. During the pressing operation the frame is, as illustrated in Figs. 5 and 9, placed against the transverse arms S' S' and against the ring $g'$. The pressing is then effected in exactly the same manner as if a longitudinal blank were being pressed. The adjustment of the frame takes place automatically, since in this case, also, the said frame is (this time at its exterior periphery) forced by the pressure of the pressing-ring into the angular recess formed by the parts $g$ and $g'$ and displacement thereby prevented.

The movement of the frame is produced by the rotary motion of the pressing and guide rollers, describing either a circle or other curve, and depending upon the pressure and the simultaneous rotary motion of the pressing-roller upon the inside of the frame.

Owing to the fact that the annular portion $g'$ of the guide-roller is made exchangeable and the arm S S' S' adjustable both the outer and inner sides of frames can be provided with ornamental impressions, irrespective of the dimension of their central opening and of the width of the frame.

Instead of causing the disk $g$ to be rotated by friction alone it may be actuated by means of wheel or belt gear, the rotary motion imparted being proportionate to the rotation of the upper pressing-roller. This latter method of feeding is of great advantage in cases where comparatively hard and thick blanks are to be impressed.

For the purpose of obtaining clearer impressions upon the blanks the pressing-ring and guide-roller may be previously heated and the wood or other material may be subjected beforehand to a preparatory treatment of any suitable kind, which need not, however, be described here, because such treatment is already known and therefore does not lie within the scope of this invention.

I have described both a pressing-ring and a pressing-roller, either of which may be employed for forming the design on the blank,

but it will be manifest that the terms are practically synonymous, as the real difference is one only of size, and hence where the term "ring" is used I wish it to be understood that it also includes a roller, and vice versa.

What I claim is—

1. In an apparatus for ornamenting strips or frames, the combination with a pressing-roller *b* bearing on its periphery the design to be impressed on the blank, of a guide-roller arranged adjacent to the pressing-roller and comprising a disk *g* mounted rotatably on a bolt *m* and a ring *g'* resting on said disk and mounted on said bolt to rotate independently of the disk, the disk projecting beyond said ring and the face of the disk being at a right angle to the periphery of the ring, substantially as described and for the purpose specified.

2. In an apparatus for ornamenting strips or frames, the combination with a pressing-roller *b* bearing on its periphery the design to be impressed on the blank, of an adjustable table *f* arranged adjacent to the pressing-roller, a bolt *m* adjustably secured to said table and provided with an extension *f*, a guide-roller *g*, *g'*, rotatably mounted on said bolt and having an L-shaped periphery to receive and support the blank to be ornamented, and a support for said blank consisting of a rod S arranged on the said extension and provided with transverse arms S', S', against which the blank is adapted to rest, substantially as described.

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

FRANZ ALOIS BRAUSIL.

Witnesses:

FERDINAND SAIKL,

AUGUST C. MAYER.