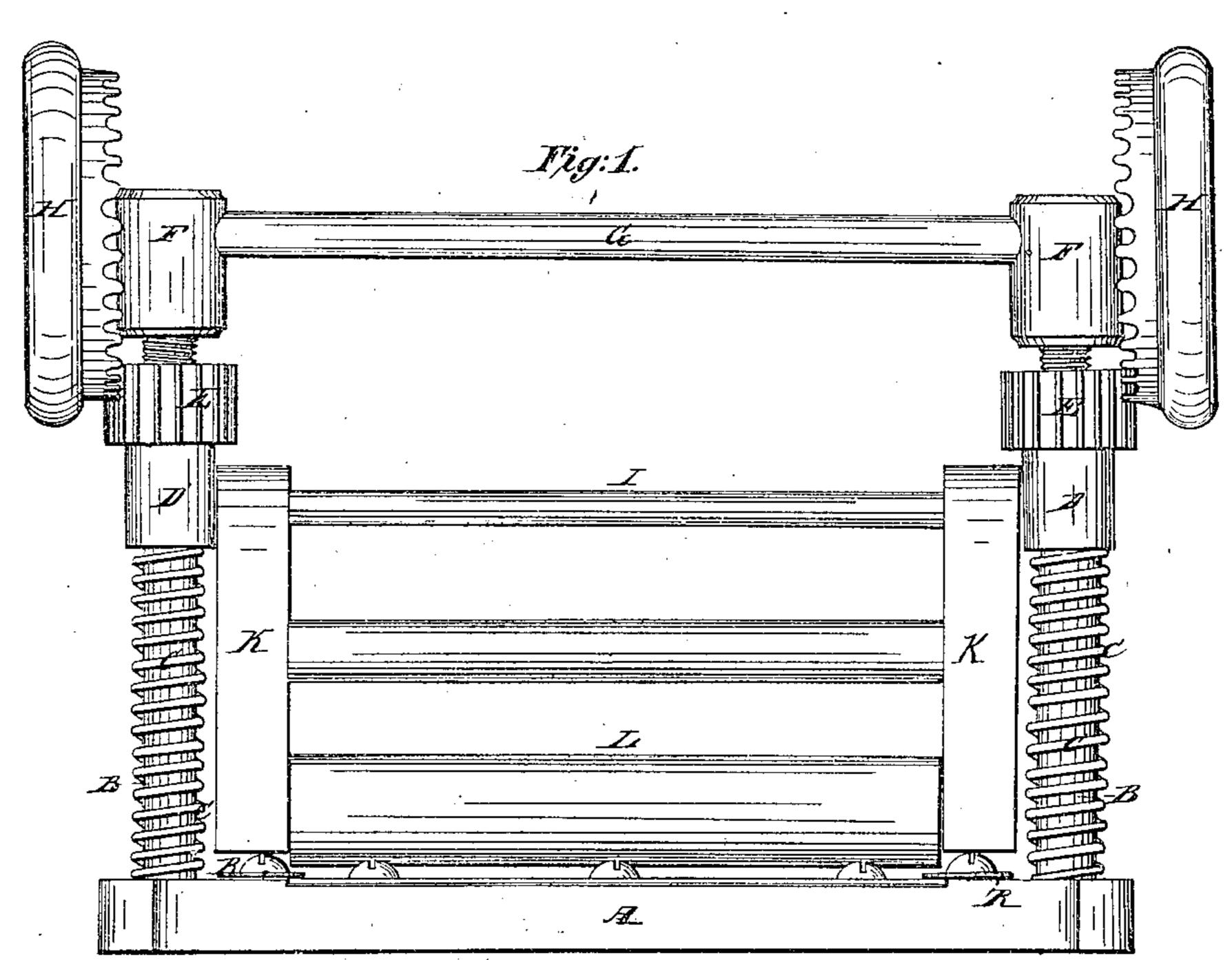
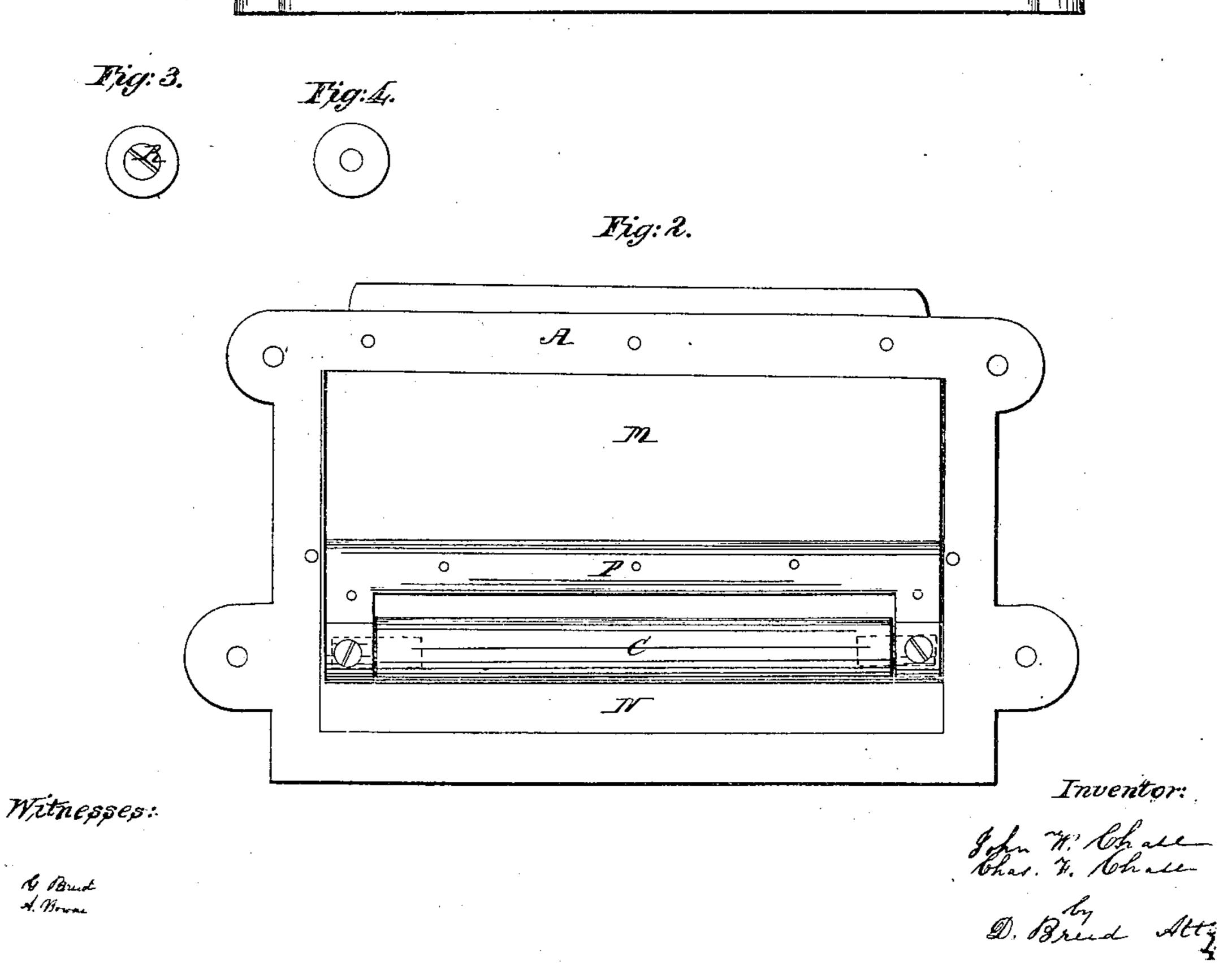
J. W. & C. F. CHASE. SKIVING MACHINE,





United States Patent Office.

JOHN W. CHASE AND CHARLES F. CHASE, OF NORTH WEARE, NEW HAMPSHIRE.

SKIVING-MACHINE.

Specification forming part of Letters Patent No. 42,836, dated May 24, 1864.

To all whom it may concern:

Be it known that we, J. W. CHASE and C. F. CHASE, of North Weare, in the county of Hillsborough and State of New Hampshire, have invented a new and useful Improvement in Skiving-Machines; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Our invention or improvement in skivingmachines consists, first, in the use of a friction-roller attached to the spring-apron by means of an inflexible frame, and in the use of a collared screw as a stop to hold down the apron and roller; and, secondly, in the arrangement of the gear-shaft upon the same posts or standards which support and guide

the gage-roller.

In the skiving-machines heretofore in use and constructed somewhat similarly to ours, four posts have been employed—two for supporting the gear-shaft and-two others for supporting the pinions, thimbles, and springs employed for setting the gage-roller. These posts cannot be cast with the bed plate on account of the difficulty of drawing the mold. Therefore two of the posts were cast separately, and then fastened to the bed-plate by means of screws.

. In order to avoid expense of metal, and also to save labor, we have invented a new ar. rangement by which the gear-shaft, friction. roller, and devices for setting the latter are all supported upon the same two posts.

In the accompanying drawings, Figure 1 is a back view of our machine. Fig. 2 is a bottom view of the same. Fig. 3 is a detached view of the collared screw. Fig. 4 represents

the collar.

In the construction of our machine the bed plate A is cast without any posts or standards. The two posts B are inserted in the bed-plate. Upon these posts are placed the coiled springs C and the thimbles D, so as to slide up and down. These are held in place by the pinions E, which have screw threads, and are capable of being raised or lowered like screw-nuts. After these pinions are placed on the posts, the latter are crowned

with the journal boxes F, and then the shaft G is inserted and the cog-wheels H brought in place to gear into the pinion E. By this arrangement it will be seen that pinion E can be raised or lowered at pleasure by simply turning one of the cog-wheels H, both pinions rising and falling at the same time and exactly the same distance.

The rod I is inserted into the thimble D, and therefore rises and falls with the thimble, carrying the swinging arms K and gage-roller L, which is thus adjusted to the proper height above the knife, according to the desired thick-

ness of the leather.

On the under side of the apron M we have arranged a friction-roller, O. Fig. 2, close to the edge of the knife. This roller is held in an inflexible frame, P, which is riveted to the apron in order to prevent the latter from twisting. The journals of this roller are made separately, (as indicated in dotted lines,) and held in place by screws R.

The spring-apron M and roller O are adjusted by means of a collared screw, R, Figs. 1 and 3, inserted into the bed-plate, the collar overlapping the edge of the apron, as seen

in Fig. 1.

The details of construction of our machine may be somewhat varied without departing from our invention.

Having thus fully described our invention, what we claim, and desire to secure by Letters Patent of the United States, is-

1. The friction roller O, in combination with the inflexible frame P and spring apron M, substantially as set forth.

2. The use of the above described collared

screw for adjusting the spring-apron

3. Supporting the gear-shaft G upon the same posts or standards, B, which support and guide the gage roller L, substantially in the manner and for the purposes set forth.

JOHN W. CHASE. CHARLES F. CHASE.

Witnesses to signature of John W. Chase: DANIEL BREED,

G. Breed.

Witnesses to signature of Charles F. Chase: DANIEL HANSON, SIDNEY B. CHASE.