

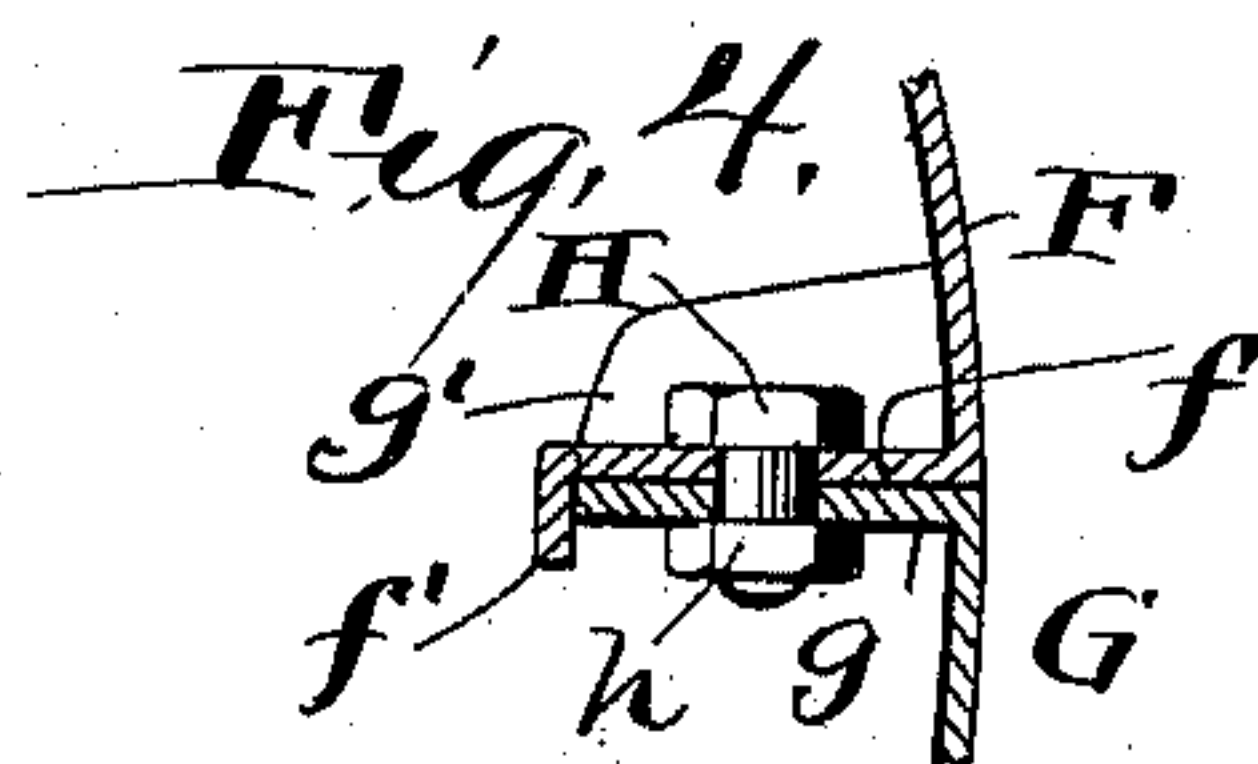
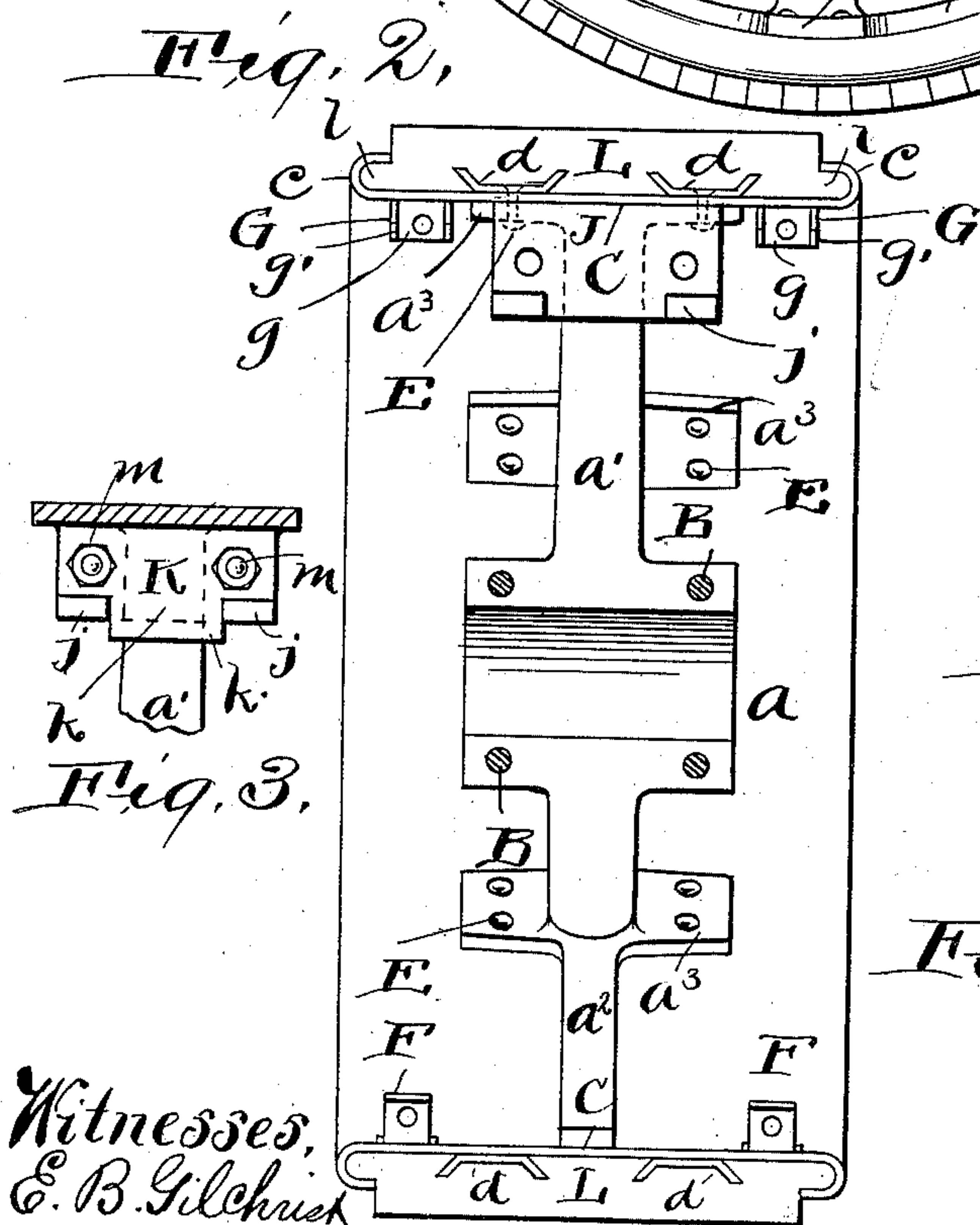
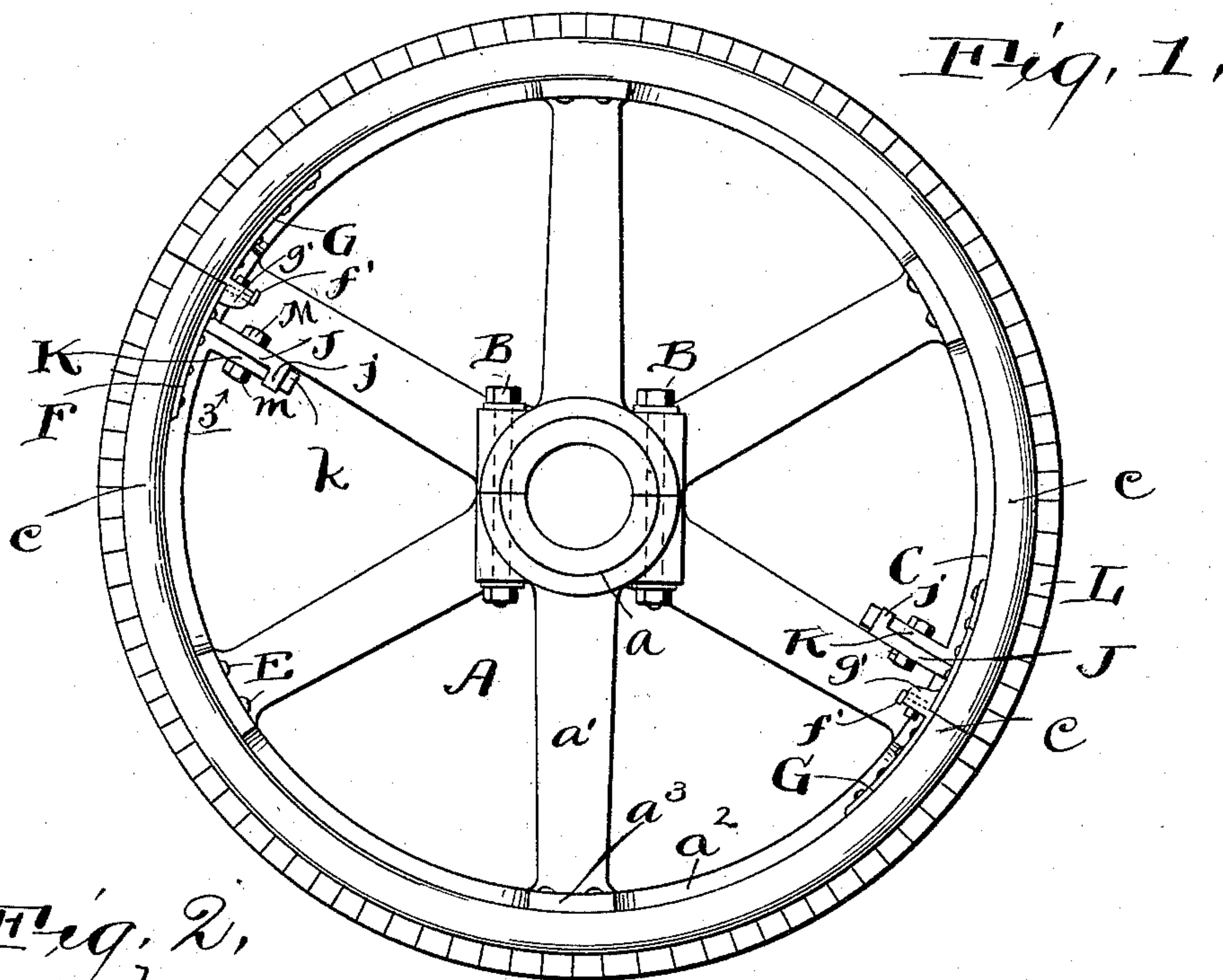
No. 609,976.

A. SCHIMINSKY.  
PULLEY.

Patented Aug. 30, 1898.

(Application filed Mar. 18, 1898.)

(No Model.)



*Fig. 5,*

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By his Attorneys,  
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Witnesses,  
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# UNITED STATES PATENT OFFICE.

ADOLF SCHIMINSKY, OF CLEVELAND, OHIO.

## PULLEY.

SPECIFICATION forming part of Letters Patent No. 609,976, dated August 30, 1898.

Application filed March 16, 1898. Serial No. 674,049. (No model.)

*To all whom it may concern:*

Be it known that I, ADOLF SCHIMINSKY, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Improvement in Pulleys, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

My invention relates to a pulley, and is particularly concerned with pulleys having a facing of strips of leather or similar material set on edge, as shown in Patent No. 332,998, granted to C. Copeland December 22, 1885, and now owned by me.

One of the objects of the invention is to provide for holding the leather strips in place by means which shall be very simple, neat, and efficient, and being adapted to be made of sheet metal may be very cheap.

Another object is to provide simple and efficient means for holding the abutting edges of halved pulleys in place.

The invention consists of the construction and combinations of parts hereinafter described, and definitely specified in the claims.

The drawings clearly illustrate my invention.

Figure 1 is a side elevation of a pulley embodying the same. Fig. 2 is an elevation of one-half of the pulley, looking at the inner side thereof. Fig. 3 is a view of the interlocking members for holding the meeting edges of the pulley-center in place at the periphery, looking from the point 3 in Fig. 1 in the direction of the arrow. Fig. 4 is a central section of the interlocking members for holding the rim in place; and Fig. 5 is a face view of such members, looking in a direction at right angles to Fig. 4.

Referring to the parts by letters, A represents the pulley-center, composed of a hub portion  $a$ , the spokes  $a'$ , and the peripheral rib  $a^2$  and the flanges  $a^3$  on opposite sides of the spokes. This center in small cases may be made solid, though the larger pulleys are preferably made in two halves, as shown in the drawings, which are secured together by bolts B passing through the hub.

In the form shown in Figs. 1 and 2 a sheet-metal rim C surrounds the rib  $a^2$  and the flanges  $a^3$ . This rim is secured by rivets passing through the flanges  $a^3$ , while the peripheral rib  $a^2$  prevents the distortion of the pul-

ley when the rim is riveted on. Thus the pulley is at the same time very rigid and very light. The rim C has its peripheral edges turned outward and backward, so as to form a roll of substantially U shape in cross-section, as shown at c. Intermediate of the curved rolls are peripheral dovetailed pieces  $d$ , which become rings when the halves of the pulley are joined. These pieces are preferably made of sheet metal and are held in place by the same rivets or bolts E which hold the rim to the flanges of the pulley-center.

L represents the leather strips. These are held in place by the dovetailed pieces or rings taking into similarly-shaped grooves in the strips and by the rolled edges of the rim, which, as shown, receive the curved projecting ends  $l$  of the strips. When the pulley is made in halves, these strips are inserted from the open edge at the diametrical plane and are shoved around into place. When the pulley is made solid, the outwardly-extending portion of the pieces  $d$  may be cut away for a distance equal to the thickness of a strip of leather to allow its insertion. The rolling up of the edges of the rim, as shown, allows me to hold the leather strips in place without the necessity of bolting on additional dovetailed pieces at the outer edges of the pulley, which are not only unsightly, but diminish the effective width of the pulley-face. Moreover, it allows me to use a pulley having a sheet-metal rim, as shown in Fig. 2, which may be more cheaply constructed and is lighter and more satisfactory than if made of cast-iron, while if the rims are of the forms shown in Fig. 6 they are adapted to be applied to an old pulley, thus rejuvenating it. If such old pulley is worn untrue, this is immaterial, as after the leather strips are installed the pulley may be centered and turned up true on a lathe.

To prevent the displacement of the meeting edges of the pulley-periphery, I provide interlocking members, secured to those edges both for the pulley-center and for the sheet-metal rim. Those for the pulley-center are preferably made integral, the one with a spoke and the other with the rib  $a^2$ , and this center is divided along the side of a spoke, as shown.

The interlocking member, which is a portion of the spoke, is indicated by J and consists of a plate or flange having two projecting lips  $j$ , and the member for the other half



of the pulley, which, as stated, is preferably part of the rib  $a^2$ , is a plate K, having a projection or flange  $k$ , which lies between the lips  $j$  and at its end carries a lip  $k'$ , projecting in the opposite direction to the lips  $j$ . The result is that the lips  $j$ , bearing against the flange  $k$ , prevent the lateral displacement of the parts, while by those lips bearing against the plate K and by the lip  $k'$  bearing against the plate J radial movement in either direction is prevented between the plates. Bolts M and nuts  $m$  prevent the separation of the plates when the halves of the pulley are joined.

The interlocking members for the sheet-metal rim are similar. One of these members consists of the strip or plate G, curved to fit the pulley and having at its end which is at the diametric edge of the half-pulley a flange  $g$ , projecting substantially radially inward, which flange has lips  $g'$  extending from its sides in the opposite direction to the plate G and at substantially right angles to the flange  $g$ . The other member of the lock consists of the plate F, adapted to be bolted to the other half of the pulley and having at its end the flange  $f$ , the end of which terminates in the lip  $f'$ , projecting in the opposite direction to the plate F.

When the two members just described are in place, the flange  $f$  lies between the lips  $g'$ , whereby lateral relative movement of the parts of the rim in a direction parallel with the axis of the pulley is prevented, while the lip  $f'$  lies against the edge of the flange  $g$  and prevents movement of the strip G inward with respect to the strip F, and the edges of the lips  $g'$  bear against the strip F and prevent movement in the opposite direction. Thus these two strips and the edges of the rim to which they are secured are prevented from moving by each other in any direction. A bolt H and nut  $h$  secure the two members together. The two interlocking members are shown of such form that they may be easily made of sheet metal; but, if desired, they may be malleable castings.

The sheet-metal rim is preferably divided at points which come over the central line of a spoke and its flange, and thus bolts or rivets from the rim to these flanges may be near the ends of the rim, which is desirable.

From the description given herein and the drawings it will be seen that by my improved construction a leather-faced pulley may be produced which is very simple and cheap in construction and is extremely neat in appearance, there being no bolts or nuts or screws visible on the face of the pulley or projecting at its sides.

Having described my invention, I claim—

1. In a pulley, in combination, a central body part having flanges at its periphery, a sheet-metal rim encircling said periphery and extending across the face of the pulley and having integrally-rolled-up edges which curve outwardly and backwardly so as to be of substantially U shape in cross-section,

peripheral dovetailed pieces on the outer side of said sheet-metal rim, bolts or rivets extending from these pieces and through the sheet-metal rim into the flanges of the pulley-center, whereby the same bolts or rivets hold the dovetailed pieces to the rim and the rim to the pulley-center, and strips of material similar to leather lying radially around the rim and bearing against the same and held in place by said rolled edges and dovetailed pieces and supported substantially throughout their length by said rim and dovetailed pieces, substantially as described.

2. In a pulley, a center made in two parts and consisting of a hub  $a$ , spokes  $a'$ , peripheral rib  $a^2$  connecting the ends of the spokes and lateral flanges  $a^3$  at the ends of the spokes, said center being divided through its hub and through the periphery along the side of spokes, plates or flanges J rigid with those spokes at which such division is made, plates K extending inward from the peripheral ribs at their free ends, bolts joining the plates J and K, in combination with a sheet-metal rim outside the pulley-center and secured to the flanges  $a^3$ , substantially as described.

3. The combination, in a pulley made up of separate parts, of interlocking members secured to the meeting edges of such parts, each of said members having a projection which extends over the other member, said projections being substantially at right angles with each other whereby one of said members prevents movement of the other radially inward, and the other member prevents movement of the first-mentioned member in a direction parallel with the pulley-axis, substantially as described.

4. The combination, in a pulley made of separate parts, of a lock for the meeting edges thereof, composed of two members secured to the inner side of the pulley at its periphery at the meeting edges, each of said members having flanges projecting substantially radially inward from the pulley-rim, one of said flanges having lips extending over the sides of the other flange, and the other of said flanges having a lip extending over the inner end of the first flange, substantially as described.

5. A lock for the meeting edges of a pulley-rim consisting of the two plates F and G adapted to be secured to the pulley-rim, the flanges  $f$  and  $g$  extending from the ends of said plates at right angles, the lip  $f'$  extending from the end of the flange  $f$  and adapted to come over the end of the flange  $g$  and the lips  $g'$  extending from the sides of the flange  $g$  and adapted to project beyond the flange  $f$  and bear against the plate F, substantially as described.

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

ADOLF SCHIMINSKY.

Witnesses:

PHILIP E. KNOWLTON,  
ALBERT H. BATES.