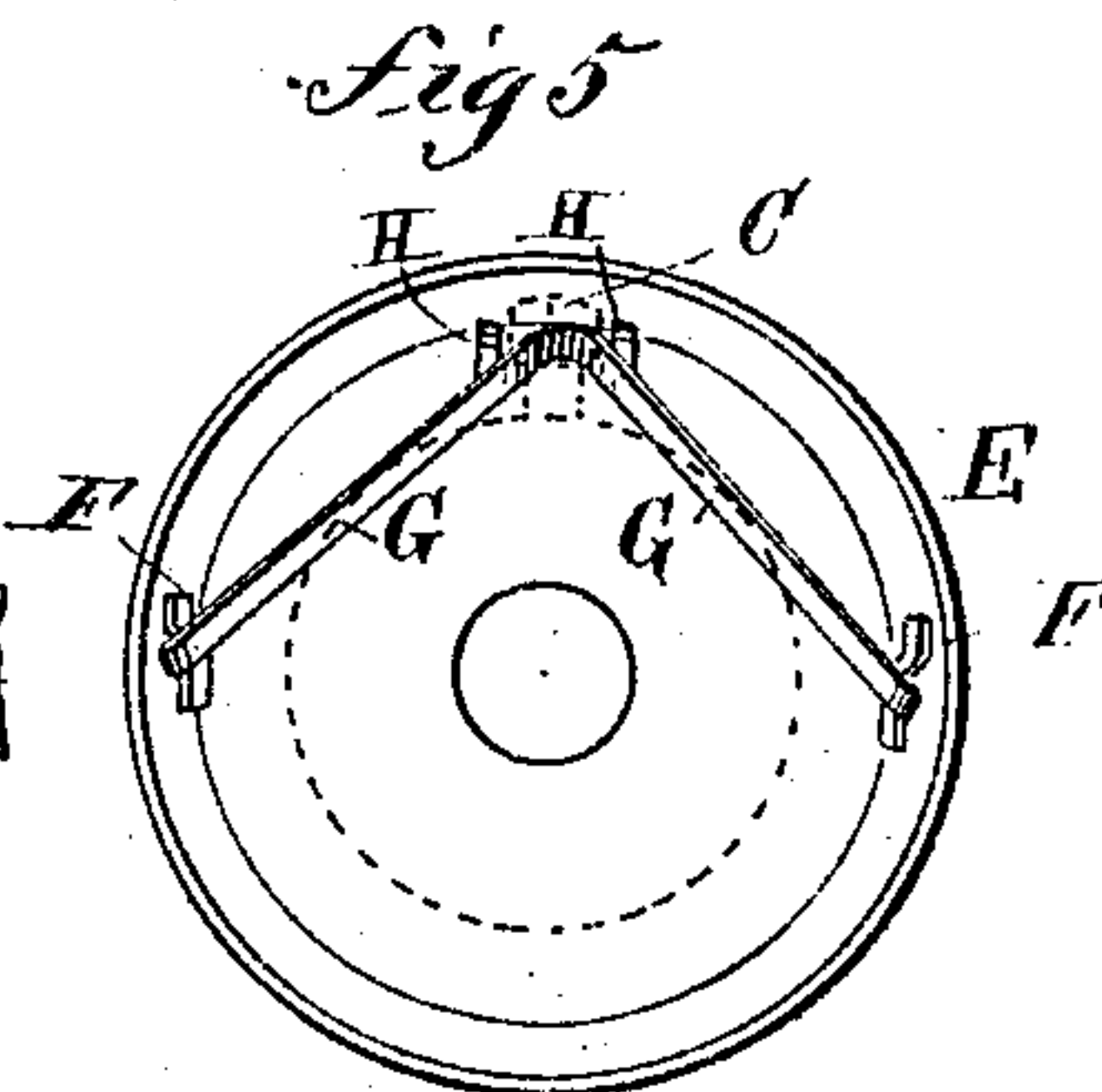
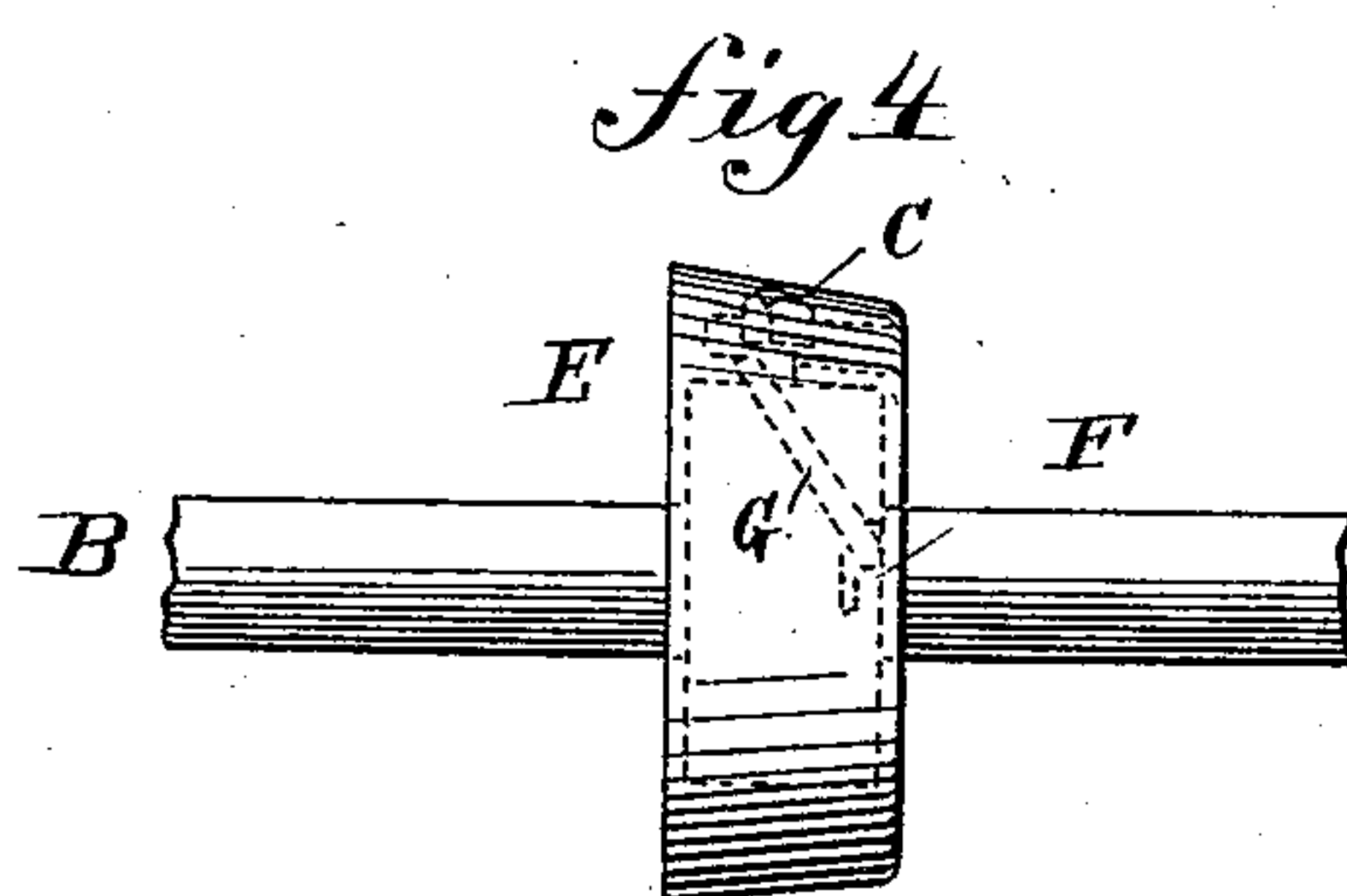
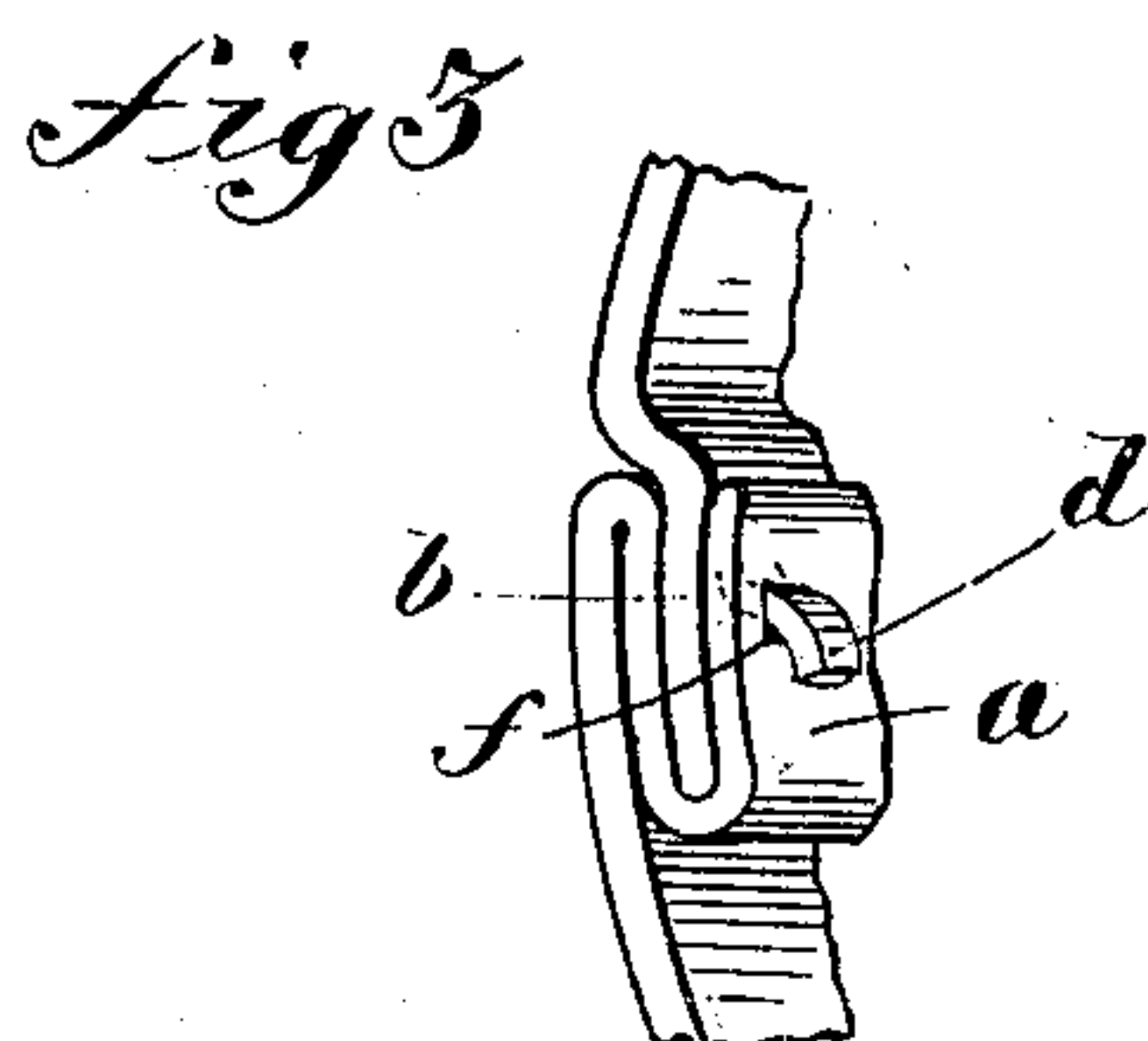
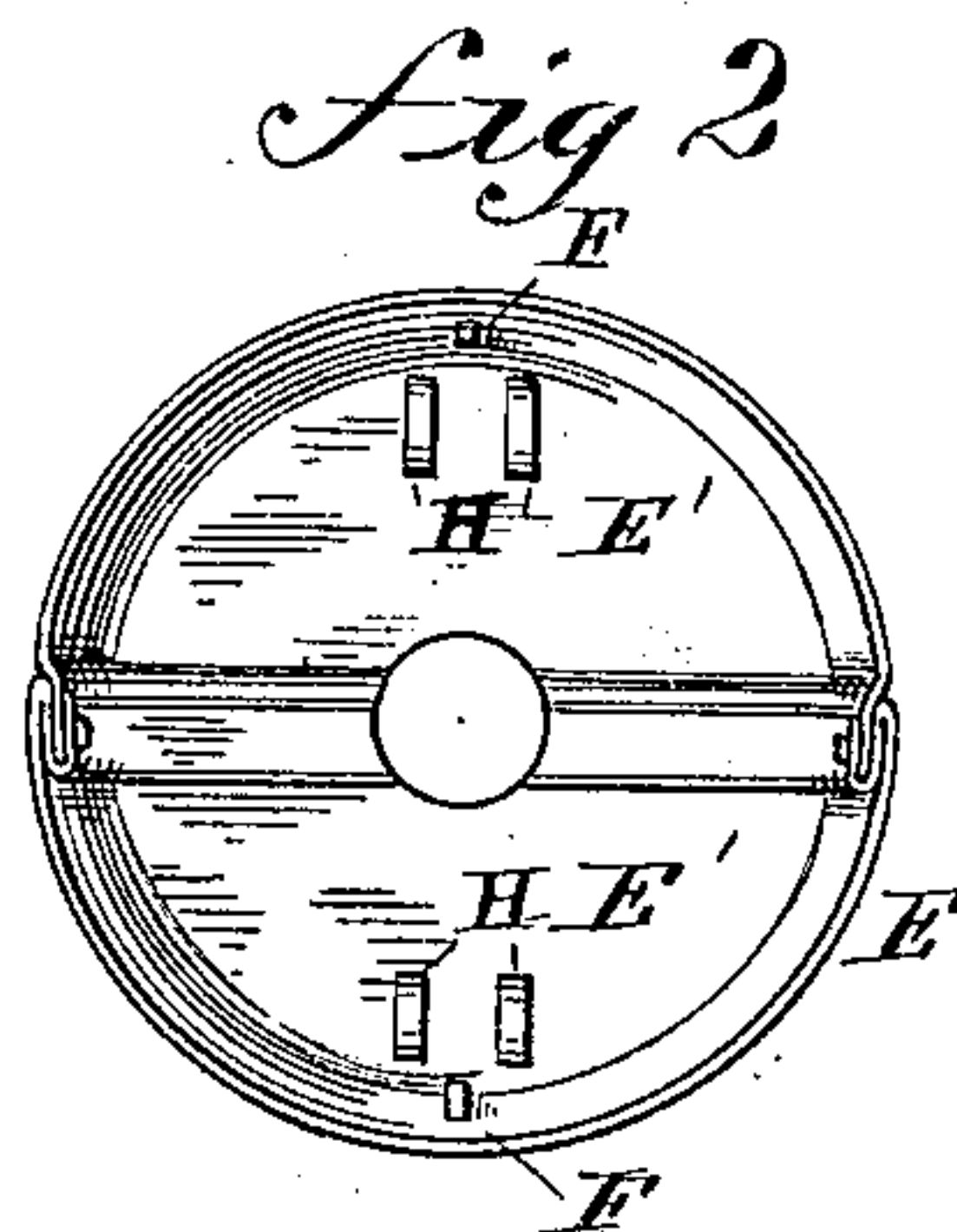
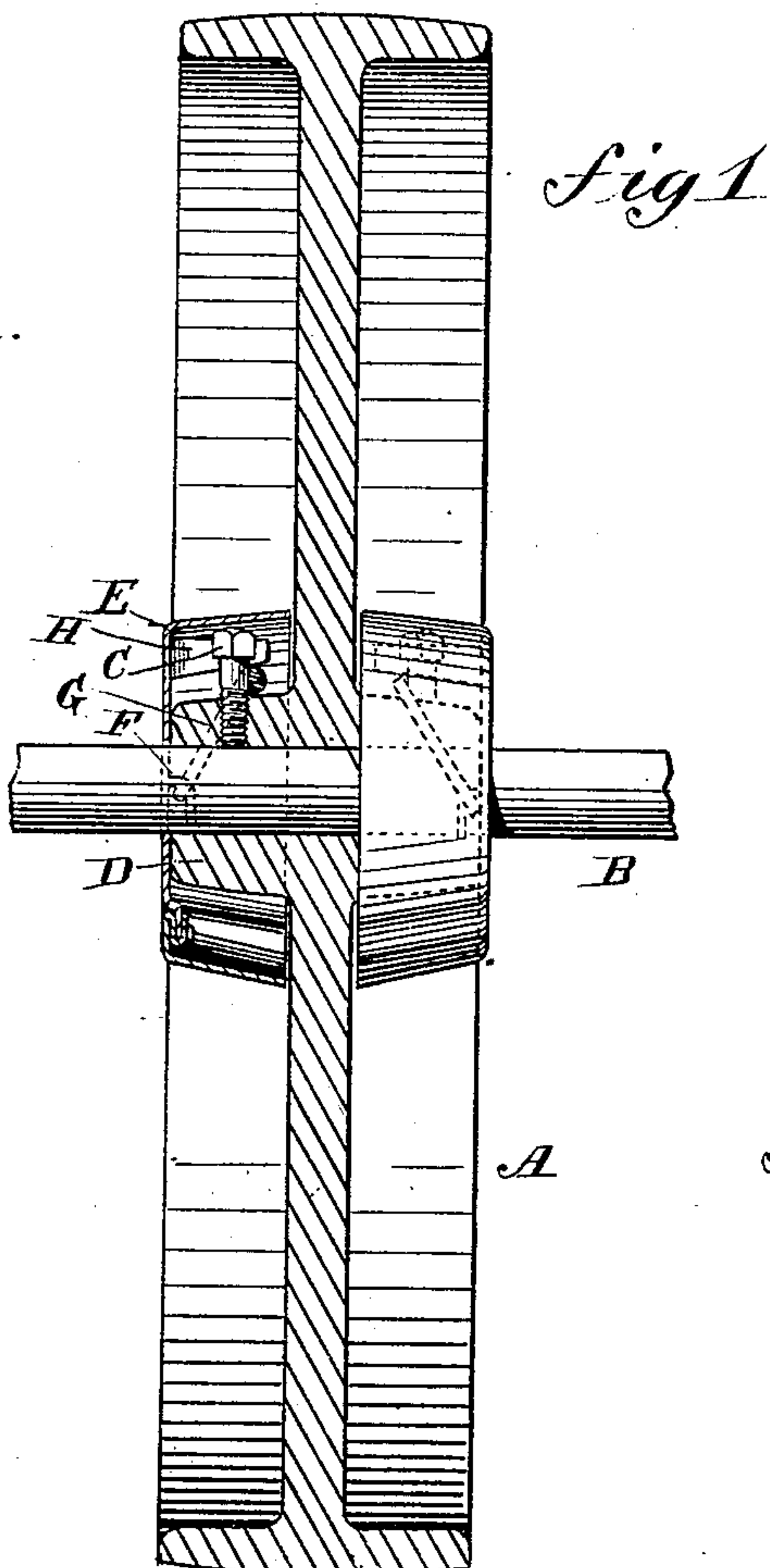


(No Model.)

C. E. FRICK.
GUARD FOR BAND PULLEYS.

No. 272,677.

Patented Feb. 20, 1883.



WITNESSES:

J. D. Garfield
C. Sedgwick

INVENTOR:

C. E. Frick

BY

Mum & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHARLES E. FRICK, OF CINCINNATI, OHIO, ASSIGNOR TO HIMSELF AND
CHARLES D. FICKS, OF SAME PLACE.

GUARD FOR BAND-PULLEYS.

SPECIFICATION forming part of Letters Patent No. 272,677, dated February 20, 1883.

Application filed July 17, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. FRICK, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and Improved Guard for Band-Pulleys, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved cap or guard for the hubs of band-pulleys to prevent the belts or the articles of clothing of the workmen from catching on the screws by which these band-pulleys are secured on the shafts.

The invention consists of a cap fitting over the hub or collar on the shaft, which cap is held on this collar by an elastic band attached to hooks on the inner surface of this cap and passed around the screw holding the pulley or collar on the shaft.

The invention further consists in a cap formed of two sections provided with tongues or grooves in the straight edges, which two sections are locked together by smaller tongues passing into apertures of the opposite section, as will be fully described and set forth hereinafter.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal sectional elevation of a band-pulley, showing its hub provided with one of my improved guards. Fig. 2 is an inside view of the cap composed of two united sections. Fig. 3 is a detail perspective view of the joint of the two sections forming the cap. Fig. 4 is a longitudinal edge view of one of the guards, showing it placed over a collar on a shaft. Fig. 5 is an inside view of one of the guard-caps.

The band-pulley A is secured on a shaft, B, by means of a set-screw, C, passed through the hub D, the head of which screw projects, as usual, from the hub. If when the pulley is in motion the belt drops or is thrown from the same, it is very apt to catch on the projecting end of this screw, whereby the belt is destroyed or injured, and frequently the clothes of the workmen and oilers who attend to the shafting are caught by this projecting screw, and the life and limbs of these workmen are

endangered. To prevent this, a cap, E, of sheet metal, hard rubber, or leather, and provided with a central aperture for the shaft, is loosely mounted on the shaft, and is placed over the hub D. Near the periphery this cap E is provided on the inner side with two downwardly-projecting hooks, F, opposite each other. An elastic band, G, has its ends secured on the hooks F, and is passed around the upper part of the screw C, as shown in Fig. 1—that is, this band will pass between the arms of the pulley and the adjoining surface of the screw, and thus this band will hold the cap over the hub. The cap can easily be attached or detached, and covers the hub so completely that neither belts nor clothing can catch on the screw C. To mount this cap on the shaft, the pulley must be removed, or the shaft must be removed from its bearings, and to avoid this I make the cap in two sections, E' E', one of which is folded along its straight edge to form a groove, *a*, and the other to form a tongue, *b*, fitting in this groove. The two sections are placed on opposite sides of the shaft, so that the tongue *b* passes into the groove *a*, and smaller tongues *d*, punched out of the tongue *b*, are passed through apertures *f* in the lip of the groove *a*, thereby holding the two sections together. This cap is held over the hub by means of an elastic band in the same manner as above described. If desired, the cap E can also be placed over a collar or over couplings uniting two sections of the shafting. Two lugs H project inwardly from the flat surface of the cap E, and when the cap is on the hub the screw-head C passes between these lugs. If the belt by accident strikes against the cap, the same cannot be thrown out of place, as the lugs H catch on the screw C.

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

1. A guard for band-pulleys, made substantially as herein shown and described, consisting of a cap provided with opposite hooks on the inner sides, combined with an elastic band attached to these hooks and adapted to be passed around the screw in the hub of the pulley, as set forth.

2. The combination, with the pulley A, the shaft B, and the screw C for holding the pul-

ley on the shaft, of the cap E, provided with the hooks F and the elastic band G. substantially as herein shown and described, and for the purpose set forth.

- 5 3. The cap E, provided with the lugs H H, inwardly projecting from its flat surface, in combination with the hub and screw, whereby

the belt is prevented from being thrown out of place, as described.

CHARLES EDWARD FRICK.

Witnesses:

LOUIS P. FICKS,
EDWARD DIENST.