

(No Model.)

O. M. BONNEY & N. D. LAMOREUX.  
ATTACHMENT TO SEWING MACHINES.

No. 286,994.

Patented Oct. 23, 1883.

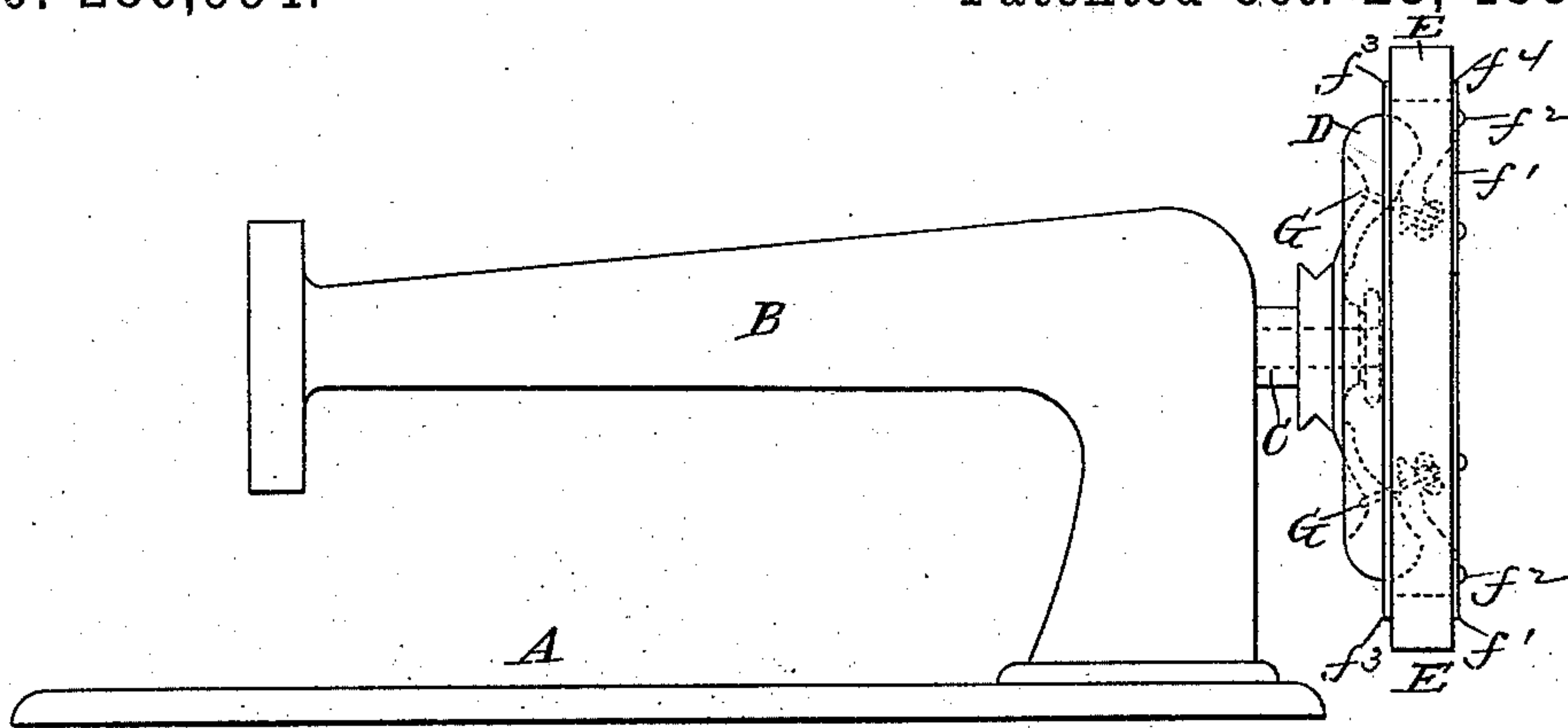


Fig. 1.

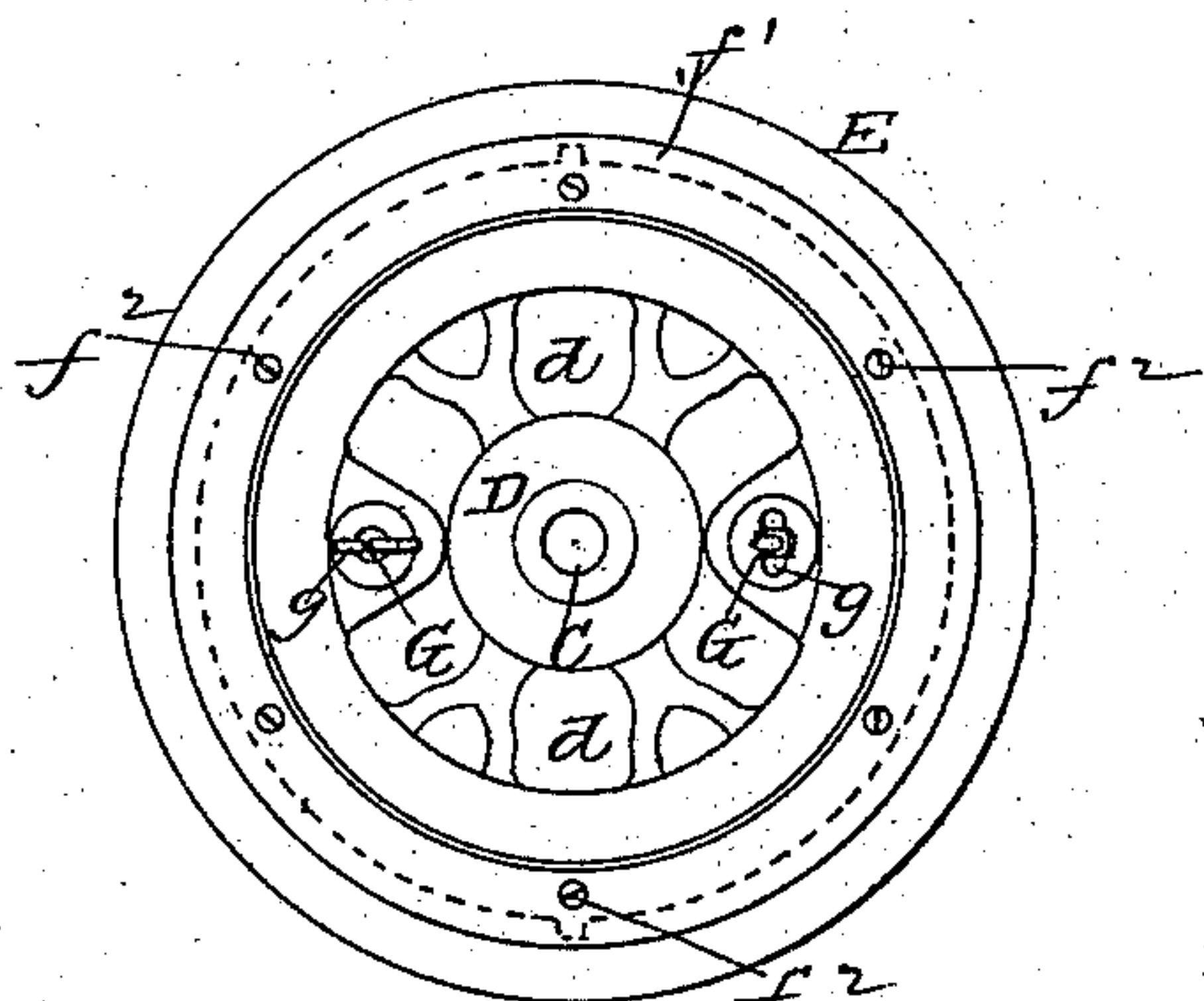


Fig. 2.

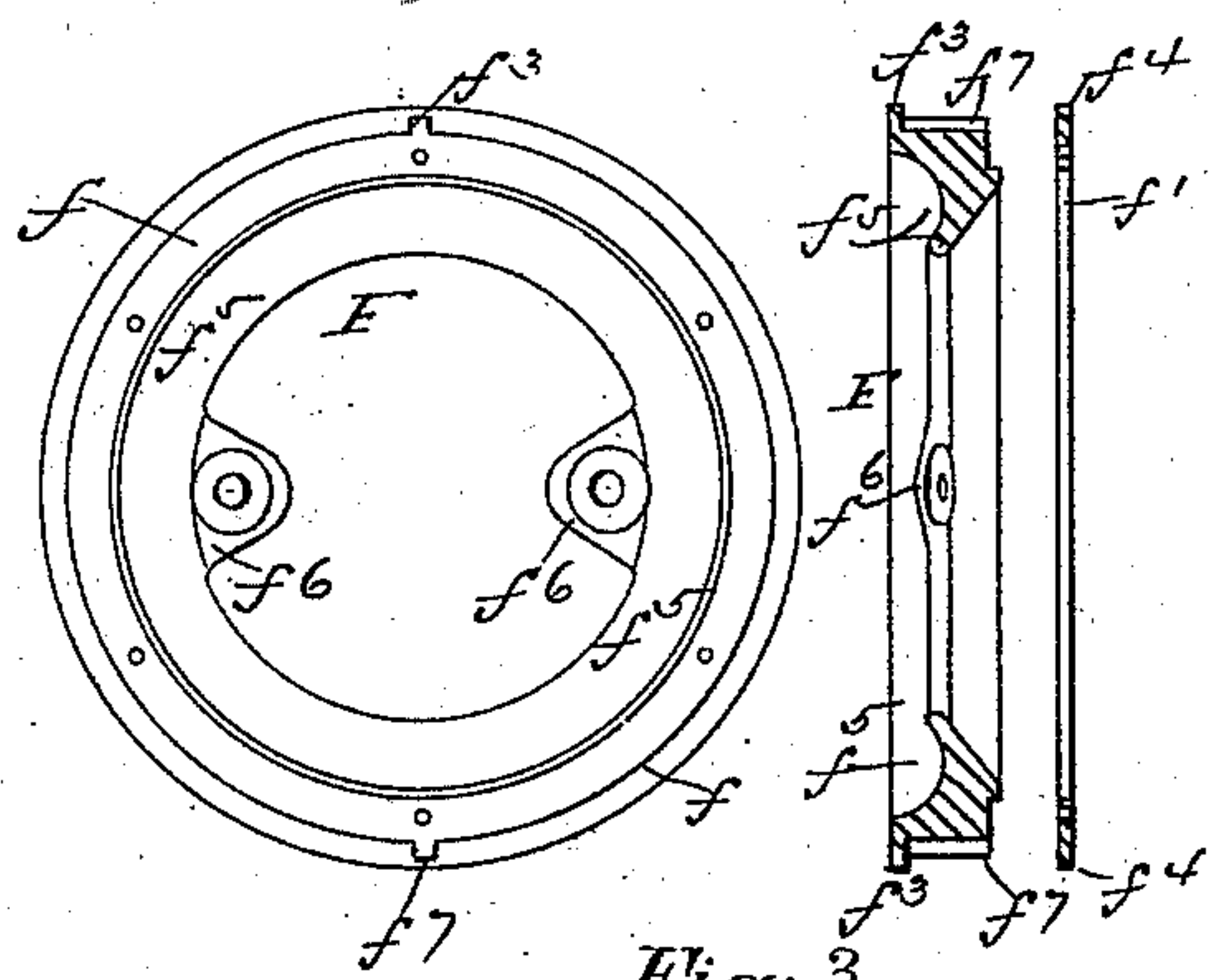


Fig. 3.

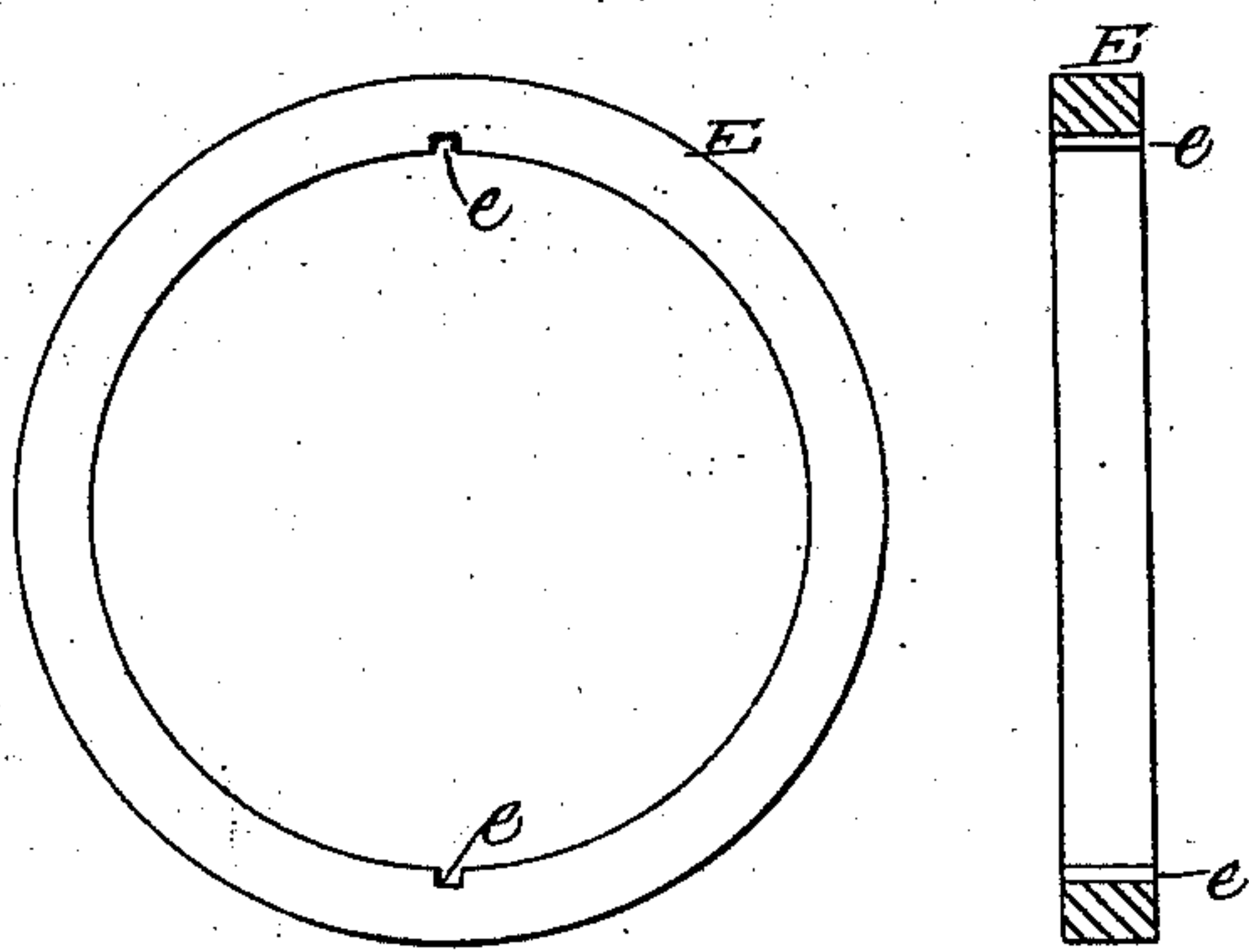


Fig. 4.

Witnesses:

Sim. T. Price  
E. W. Ginn

Inventor.

Otto W. Bonney  
Norman D. Lamoreux



# UNITED STATES PATENT OFFICE.

OTTO M. BONNEY AND NORMAN D. LAMOREUX, OF ST. LOUIS, MISSOURI.

## ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 286,994, dated October 23, 1883.

Application filed May 28, 1883. (No model.)

*To all whom it may concern:*

Be it known that we, OTTO M. BONNEY and NORMAN D. LAMOREUX, residents of St. Louis, Missouri, have jointly made a new and useful

5 Improvement in Attachments for Sewing-Machines, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, making part of this specification, in which—

10 Figure 1 is a side elevation, showing that part of a sewing-machine with which the improvement is immediately associated; Fig. 2, an end elevation; Fig. 3, a view, being a side elevation and section of the frame used in ap-  
15 plying the attachment; and Fig. 4, a similar view of the attachment.

The same letters of reference denote the same parts.

20 The present invention consists in a grindstone adapted to be readily attached to the balance-wheel of any of the ordinary sewing-machines.

A represents the bed-plate of the machine, B the arm, C the shaft, and D the balance-  
25 wheel, all of the ordinary construction.

E represents the grindstone. It is attached to the balance-wheel D, so as to rotate therewith, and in that position to serve the purpose of an ordinary grindstone. To this end the  
30 grindstone is made annular in form, as shown more distinctly in Fig. 4, and is fastened to the balance-wheel by means of the frame F. The wheel is slipped onto the part *f* of the frame and clamped thereon by means of the plate *f'*, which, by means of the screws *f''*, is  
35 fastened to the plate *f*, and so that the stone is held between the projecting flanges *f'''* *f''*. The frame of the stone thus attached is then fastened to the balance-wheel as follows: The  
40 part *f* of the frame F is shaped at *f<sup>5</sup>* to fit the side of the rim of the balance-wheel, and it is provided with the ears *f<sup>6</sup>*. These ears are perforated to receive the hook-shaped bolts G & G, which pass through the ears and hook  
45 round the arms *d d* of the balance-wheel, and by means of the nuts *g* the bolts are tightened and the frame is secured to the balance-wheel. In this manner, without in any respect altering the construction of the sewing-machine, a  
50 grindstone can be attached thereto and operated by the same means which are employed in operating the machine, and, if desired, at

the same time. The part *f* of the frame is provided with projections *f<sup>6</sup>*, to engage in the notches *e* in the frame E. This prevents the  
55 stone from turning around upon the frame.

We do not wish to be confined to any special form of sewing-machine, as it is evident that it can be applied to the balance-wheel of any of the ordinary types of sewing-machines. 60  
The stone can be readily detached from the machine by loosening the bolts G & G, whenever desired.

We claim—

1. A sewing-machine balance-wheel, D, the 65 frame F, and the grindstone E, and the means for securing the frame to the balance-wheel, combined substantially as described.

2. The combination of the annular grindstone E and the annular frame F, consisting 70 of the plates *f f'*, fastened together, substantially as described.

3. The combination of the balance-wheel D, the grindstone E, the plate *f'*, the plate *f*, 75 shaped to fit the balance-wheel and provided with the ears *f<sup>6</sup>* and the hook-shaped bolts G & G and nuts *g*, substantially as described.

4. The combination of the balance-wheel D, the grindstone E, the frame F, said frame consisting of the plate *f'*, adapted to be secured 80 to the plate *f*, which in turn is adapted to be clamped to the balance-wheel by means of the ears *f<sup>6</sup>* and the hook-shaped bolts G and nuts *g*, substantially as described.

5. The combination of the annular grind- 85 stone E, having the notches *e* and the plates *f' f*, said plates being fastened together, and said plate *f* having the projections *f'* and being fastened to the balance-wheel D.

6. A sewing-machine balance-wheel having 90 an annular grindstone fastened to a frame, which in turn is fastened to the rim of the balance-wheel.

7. A sewing-machine balance-wheel having a grindstone detachably connected with the 95 balance-wheel rim.

In testimony whereof we have affixed our signatures, in the presence of two witnesses, this 23d day of August, 1883.

OTTO M. BONNEY.

NORMAN D. LAMOREUX.

Witnesses:

JOHN W. VOSSLER,  
PAUL BAKEWELL.