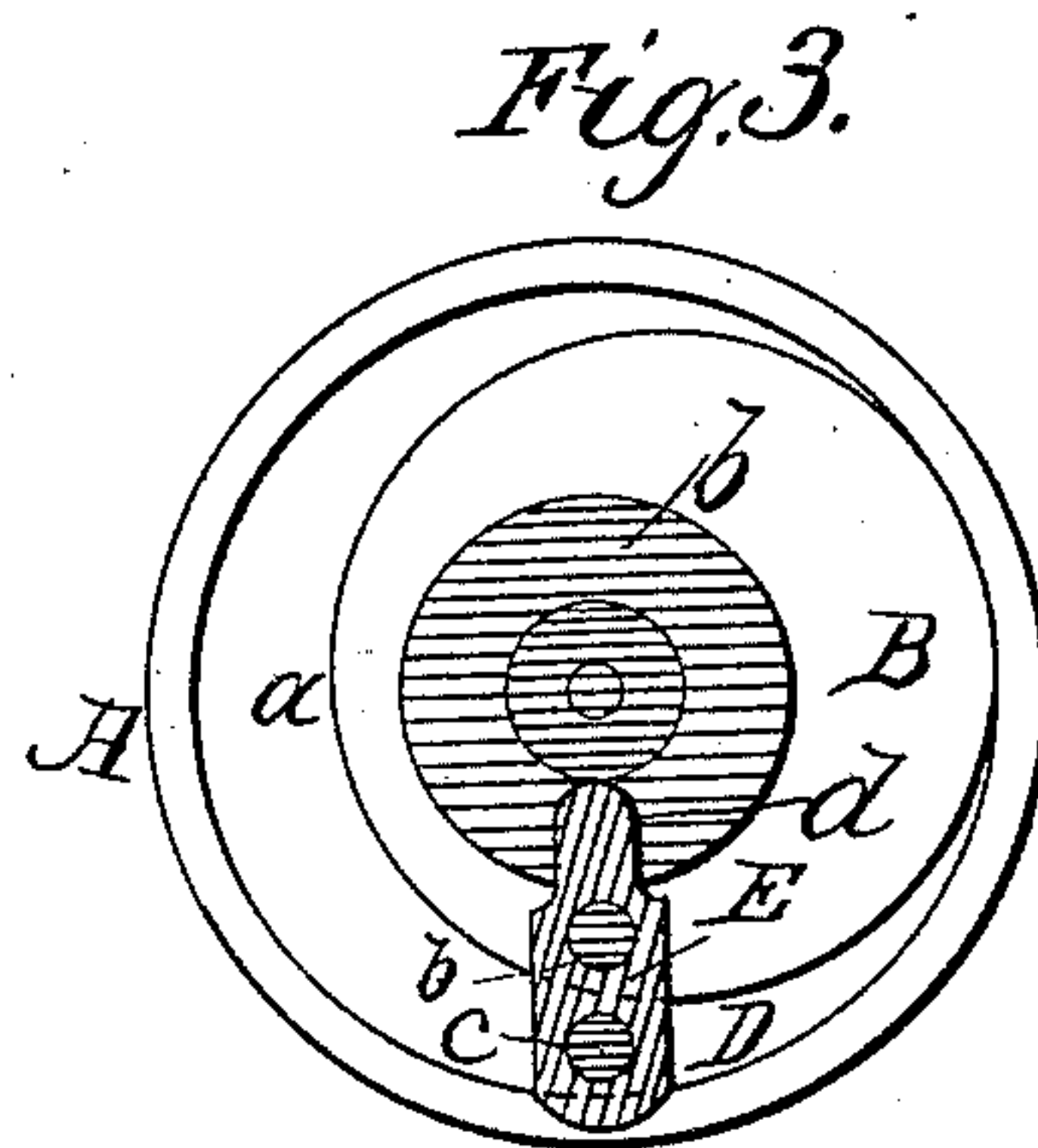
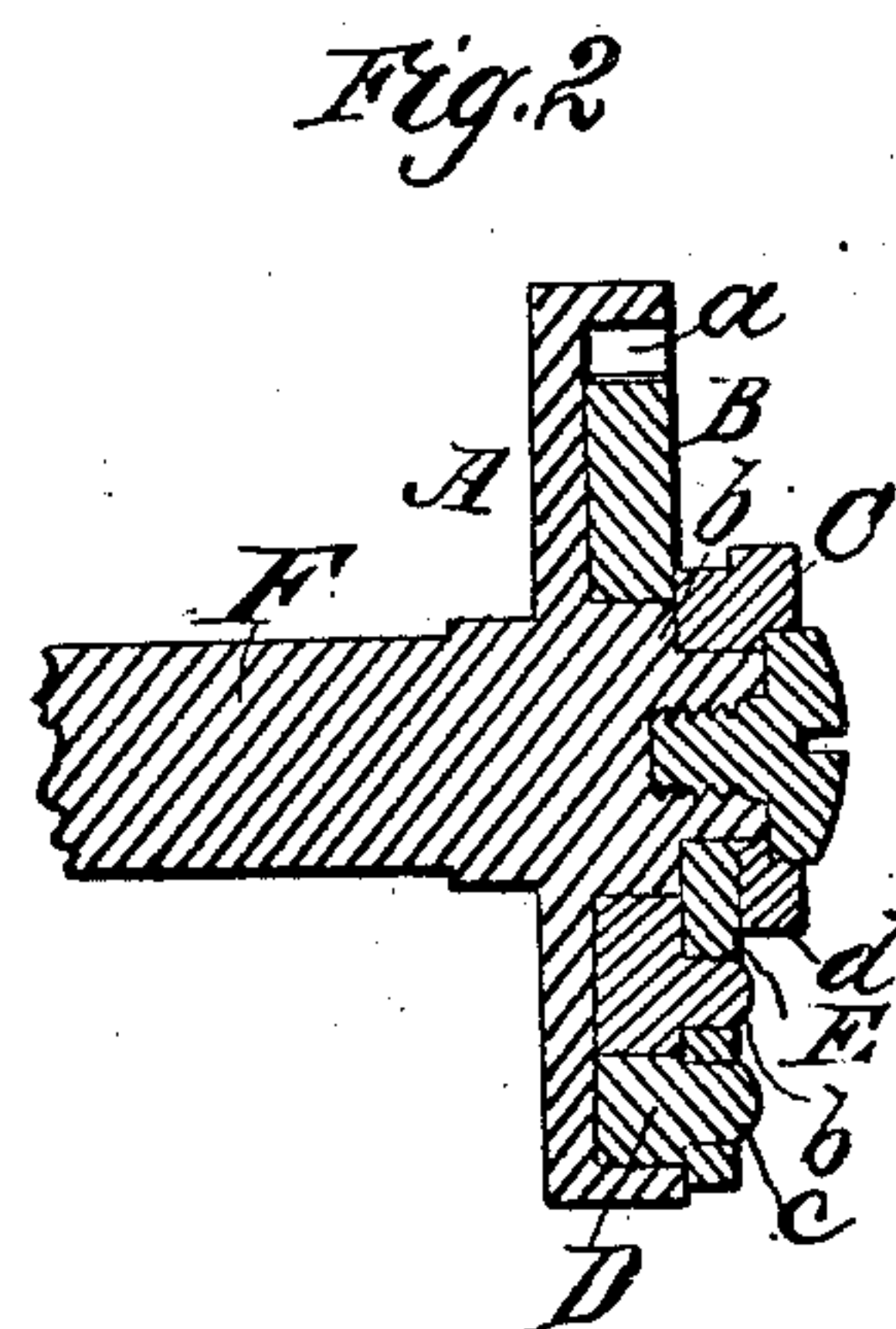
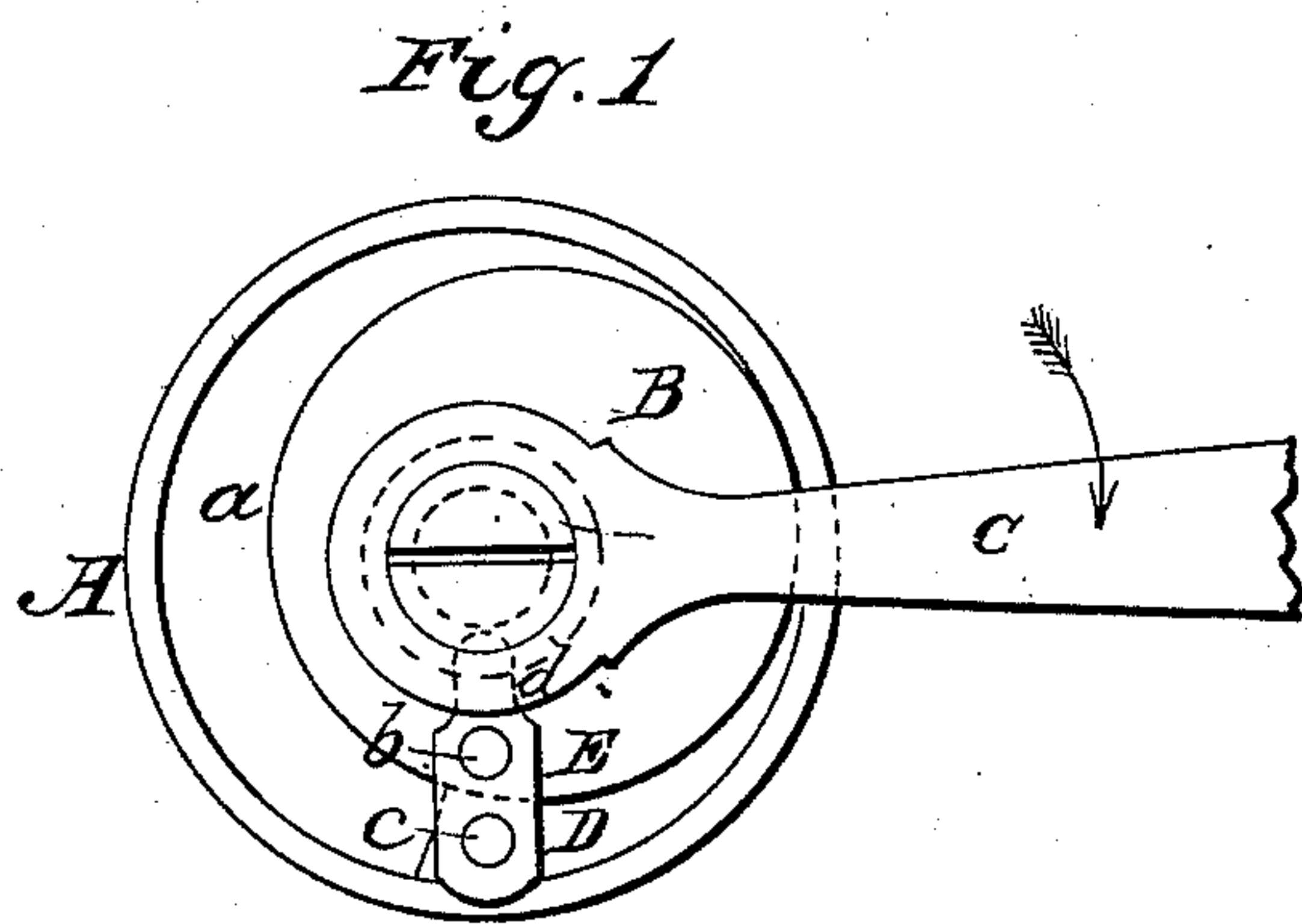


W. CHICKEN.  
Feeding Device for Sewing Machines.

No. 57,287.

Patented Aug. 21, 1866.



Witnesses.

*Samuel A. Pifer*  
*George H. Washburn*

Inventor.

*W. Chicken*

*by his Attorney*

*R. H. Lady.*

# UNITED STATES PATENT OFFICE.

WILLIAM CHICKEN, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN FEEDING DEVICES FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 57,287, dated August 21, 1866.

*To all whom it may concern:*

Be it known that I, WILLIAM CHICKEN, of Boston, of the county of Suffolk and State of Massachusetts, have invented a new and useful Friction-Feed Motion or Apparatus for Sewing-Machines, &c.; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a front view, Fig. 2 a longitudinal section, and Fig. 3 a transverse section, of it.

In the said drawings, A denotes a wheel fixed on the end of a shaft, F. The said wheel has a cylindrical chamber, *a*, made in one side of it and concentric with its periphery. Another wheel, B, and a lever, C, are arranged so as to turn on a journal, *b*, projecting from the wheel A, and arranged in its chamber and concentrically therewith.

The wheel B has its periphery against that of the chamber *a*, and its axis eccentric with respect to that of the chamber. The said wheel B, as well as the lever, should be applied to the journal, so as to be capable of being freely revolved thereon.

Between the circumference of the wheel B and that of the chamber *a* is a curved wedge, D, formed to fit to such circumferences.

A short lever, E, having for its fulcrum a pin, *b'*, projecting from the wheel B, is jointed to the wedge D by a pin, *c*, and extends into a notch, *d*, made in the lever C, the whole being as shown in the drawings.

The shaft F being supposed to be duly supported by one or more proper bearings, so as

to be capable of being revolved therein, if a reciprocating movement on its journal be imparted to the lever C, such lever C, while being moved in the direction denoted by the arrow *x*, (see Fig. 1,) will also impart a movement to the lever E, such as will not only cause the wedge to be pressed forward into the angular space between the circumferences of the chamber *a* and the wheel B, but at the same time move the wheel B in a direction opposite to that of the wedge. These movements of the wheel B and the wedge will cause the latter to bind so tightly against the periphery of the chamber *a* as to produce a rotary motion of the wheel A.

A reverse motion of the lever C will cause not only the pressure of the wedge against the periphery of the chamber to cease, but a free movement of the wedge, the wheel B, and the connecting-lever E around within the chamber *a*. In this way an intermittent rotary motion may be imparted to the wheel A. This wheel, when having teeth or grooves in its periphery, may be applied to a sewing-machine, and this, with the rest of the mechanism, be used as a means of feeding along the material to be sewed.

I claim—

The said friction-feed apparatus, as composed of the levers C E, the wedge D, and the two wheels A B, arranged and applied together substantially in manner and so as to operate as specified.

WILLIAM CHICKEN.

Witnesses:

R. H. EDDY,  
F. P. HALE, Jr.