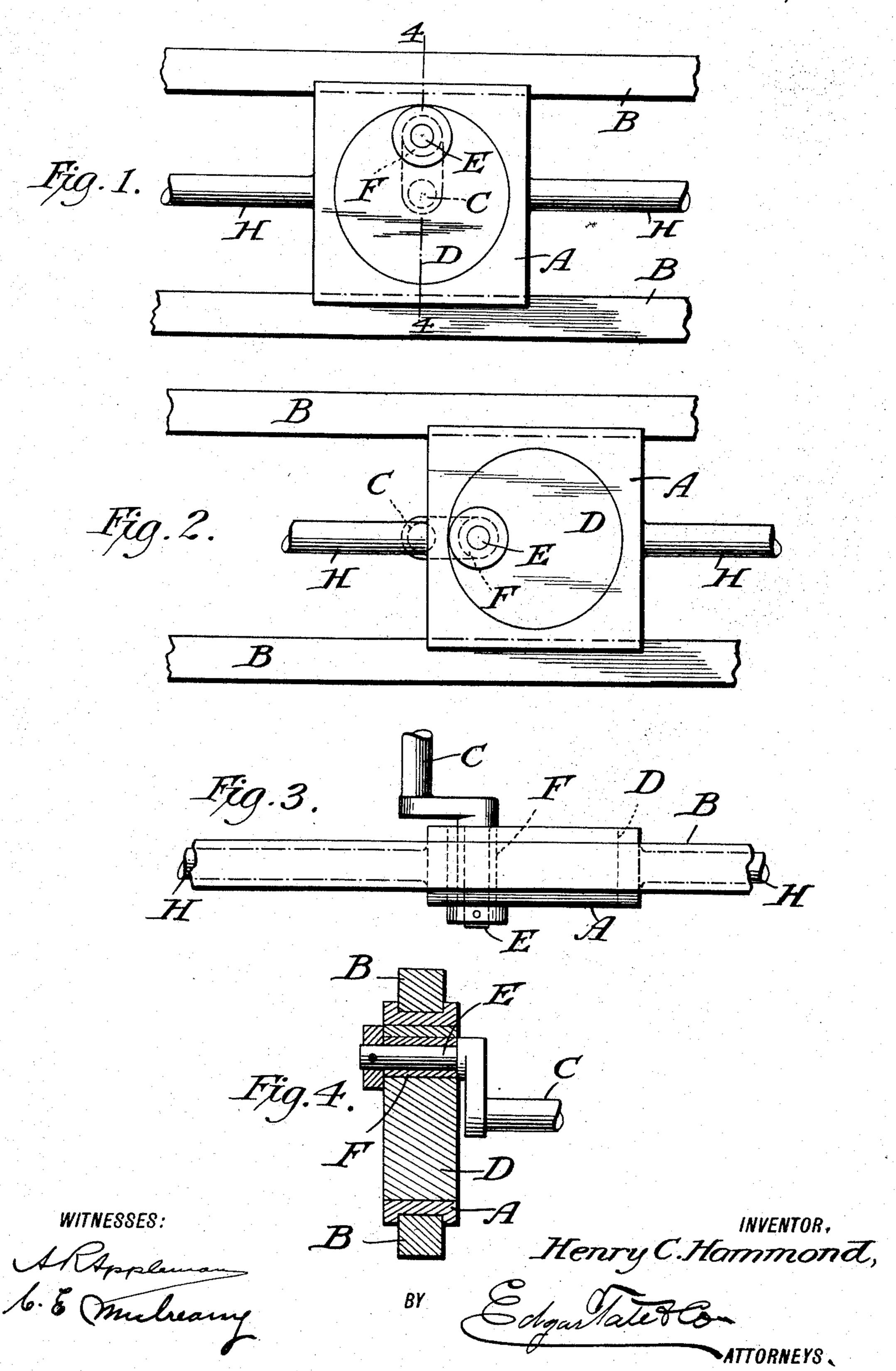
H. C. HAMMOND.

DEVICE FOR CONVERTING RECIPROCATING INTO ROTARY MOTION.

APPLICATION FILED MAR. 29, 1909.

947,233.

Patented Jan. 25, 1910.



UNITED STATES PATENT OFFICE.

HENRY CHARLES HAMMOND. OF WANSTEAD, ENGLAND.

DEVICE FOR CONVERTING RECIPROCATING INTO ROTARY MOTION.

947,233.

Specification of Letters Patent. Pat

Patented Jan. 25, 1910.

Application filed March 29, 1909. Serial No. 486,430.

To all whom it may concern:

Be it known that I, Henry Charles Hammond, a subject of the King of Great Britain, and residing at Wanstead, in the county of Essex, England, have invented certain new and useful Improvements in Devices for Converting Reciprocating into Rotary Motion, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to improved means for converting reciprocating into rotary motion and the object thereof is to provide an improved device of this class which is simple in construction and effective in operation.

The invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which:—

Figure 1 is a side view of the apparatus I employ; Fig. 2 a similar view showing the parts in a different position; Fig. 3 a plan view thereof; and Fig. 4 a transverse section on the line 4—4 of Fig. 1.

In the practice of my invention, I provide a block or cross head A which reciprocates between two parallel guide bars B, B, which are at right angles to the crank shaft C.

In the accompanying drawing Fig. 1 shows the crank in the center of its stroke, and Fig. 2 with the crank extended to one 35 end of its stroke.

Through the center of the block A and parallel with the crank shaft C, a round hole

is bored, into which is inserted a revolving disk D having a hole bored through at the same distance from its center as the throw of 40 the crank pin E. Into this hole, and over the crank pin E is fitted a concentric roller F. The revolving disk D and roller F may be fitted with ball or roller bearings.

The motive power may be applied to either 45 or both ends of the block A by means of rods H, H. It will be seen that as the block A moves between the guide bars B, B, which form a support therefor the crank pin E will revolve around the shaft C and the disk D 50 will revolve around the crank pin E, the motion of pin E and disk D being in opposite directions. The effect of this combination is that the movement of the block A is four times that of the eccentricity of the 55 crank pin E.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

A device for converting reciprocating into 60 rotary motion which comprises a suitable support, a reciprocating block mounted therein, a rotary disk mounted in said block, and a crank shaft provided with a crank having a pin mounted eccentrically in said 65 disk.

In testimony that I claim the foregoing as my invention I have signed my name in presence of the subscribing witnesses this 17th day of March 1909.

HENRY CHARLES HAMMOND. Witnesses:

H. D. Jameson, R. I. Williams.