(Model.)

## J. S. SCHOONOVER. Compound Crank.

No. 235,026.

Patented Nov. 30, 1880.

Fig.1

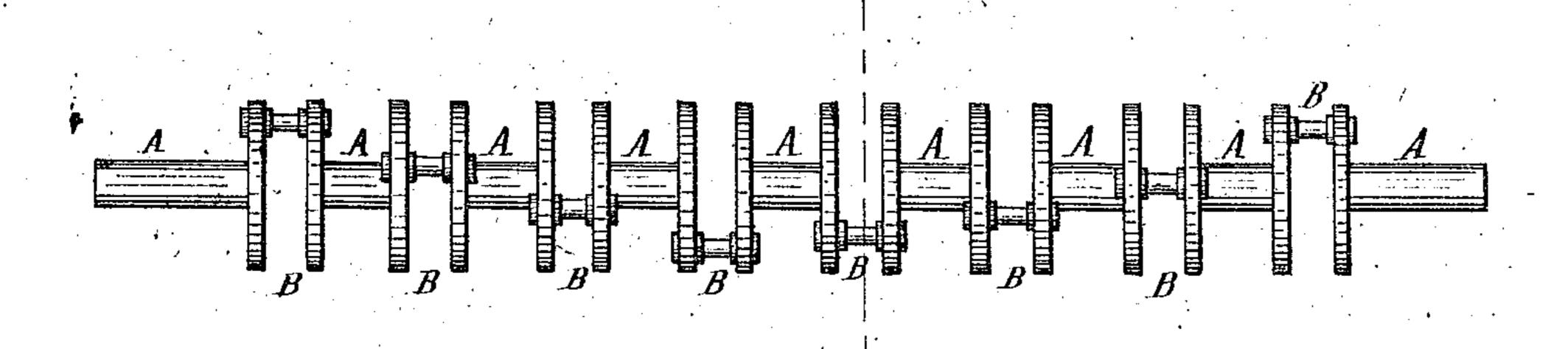
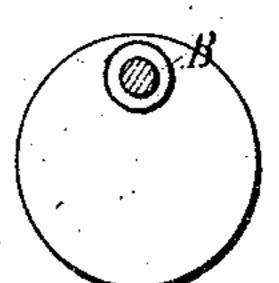


Fig. 2



WITNESSES:

Henry N. Miller. 6. Sedgwick INVENTOR:

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BY Mun to

## United States Patent Office.

JAMES S. SCHOONOVER, OF TITUSVILLE, PENNSYLVANIA.

## COMPOUND CRANK.

SPECIFICATION forming part of Letters Patent No. 235,026, dated November 30, 1880.

Application filed May 10, 1880. (Model.)

To all whom it may concern:

Be it known that I, James S. Schoonover, of Titusville, in the county of Crawford and State of Pennsylvania, have invented a new and Improved Compound Crank, of which the following is a specification.

The object of this invention is to provide a novel device whereby a series of connected machines or mechanisms may be given alternate and successive motion.

The invention consists of a series of cranks or eccentrics united by a central shaft and disposed at equal distances apart about the shaft, so as to form a complete spiral; and the device is especially adapted for imparting motion to series of stamps for crushing ores, &c., and more especially for pumps where a steady equal pressure is required.

Figure 1 is a longitudinal elevation of the device. Fig. 2 is a cross-section on line x x, Fig. 1.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents the shaft.

B B are the cranks or eccentrics, that are set 25 so as to form a complete spiral about the said shaft from one end to the other thereof. In this instance eight cranks or eccentrics, B B, are shown as composing the spiral, each succeeding one set an eighth of a circle, or forty-five 30 degrees, in advance of the other; but the number of them may be increased within the circle without departing from the principle of my invention.

Having thus fully described my invention, I 35 claim as new and desire to secure by Letters Patent—

A compound crank constructed substantially as herein shown and described, consisting of several cranks or eccentrics arranged 40 spirally at equal distances apart upon a central shaft, so as to form a complete spiral, as set forth.

JAMES S. SCHOONOVER.

Witnesses:

J. J. Holden, Jno. C. Farrington.