

No. 881,881.

PATENTED MAR. 10, 1908.

A. B. COHN.
POWER TRANSMITTING DEVICE.

APPLICATION FILED APR. 11, 1906.

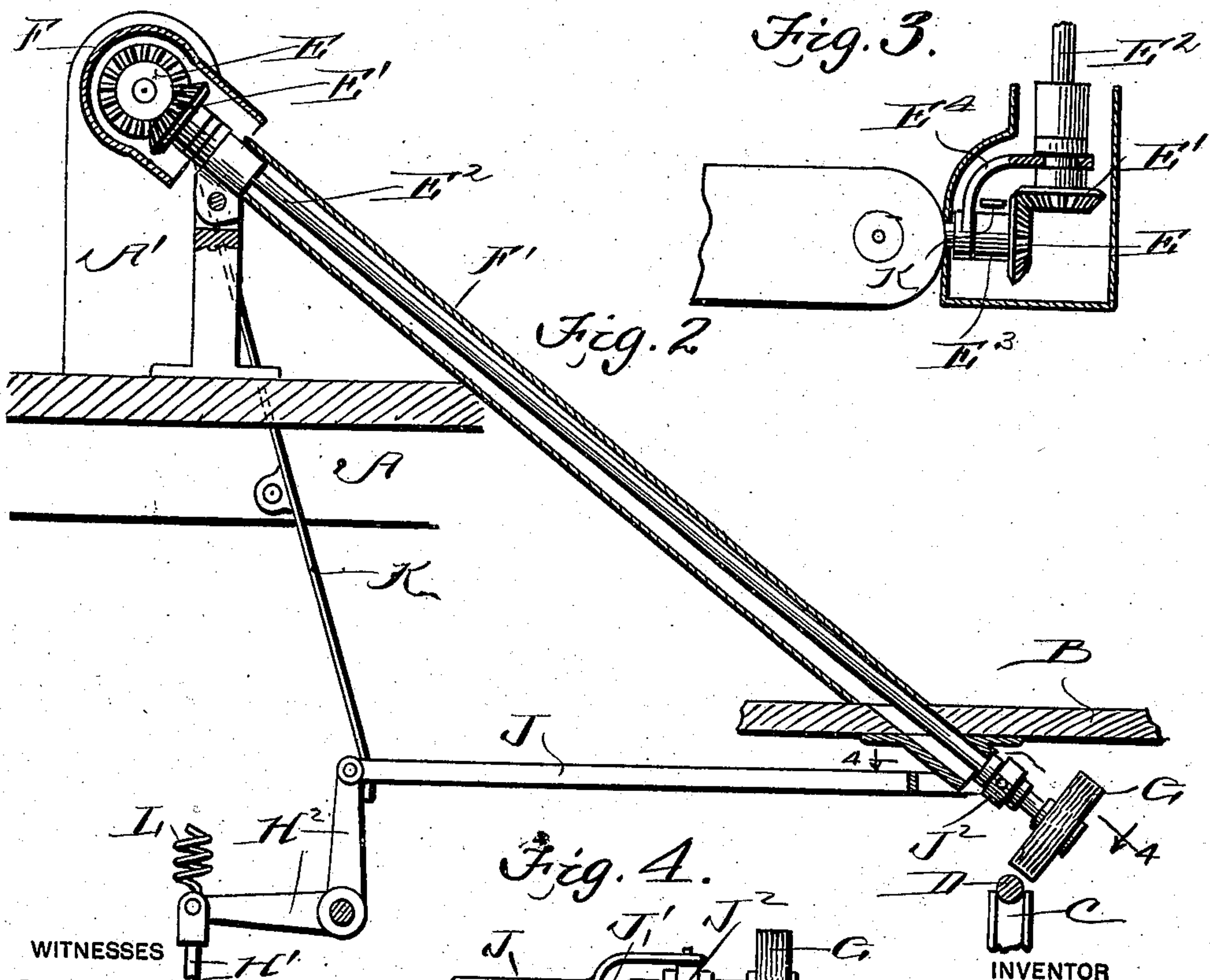
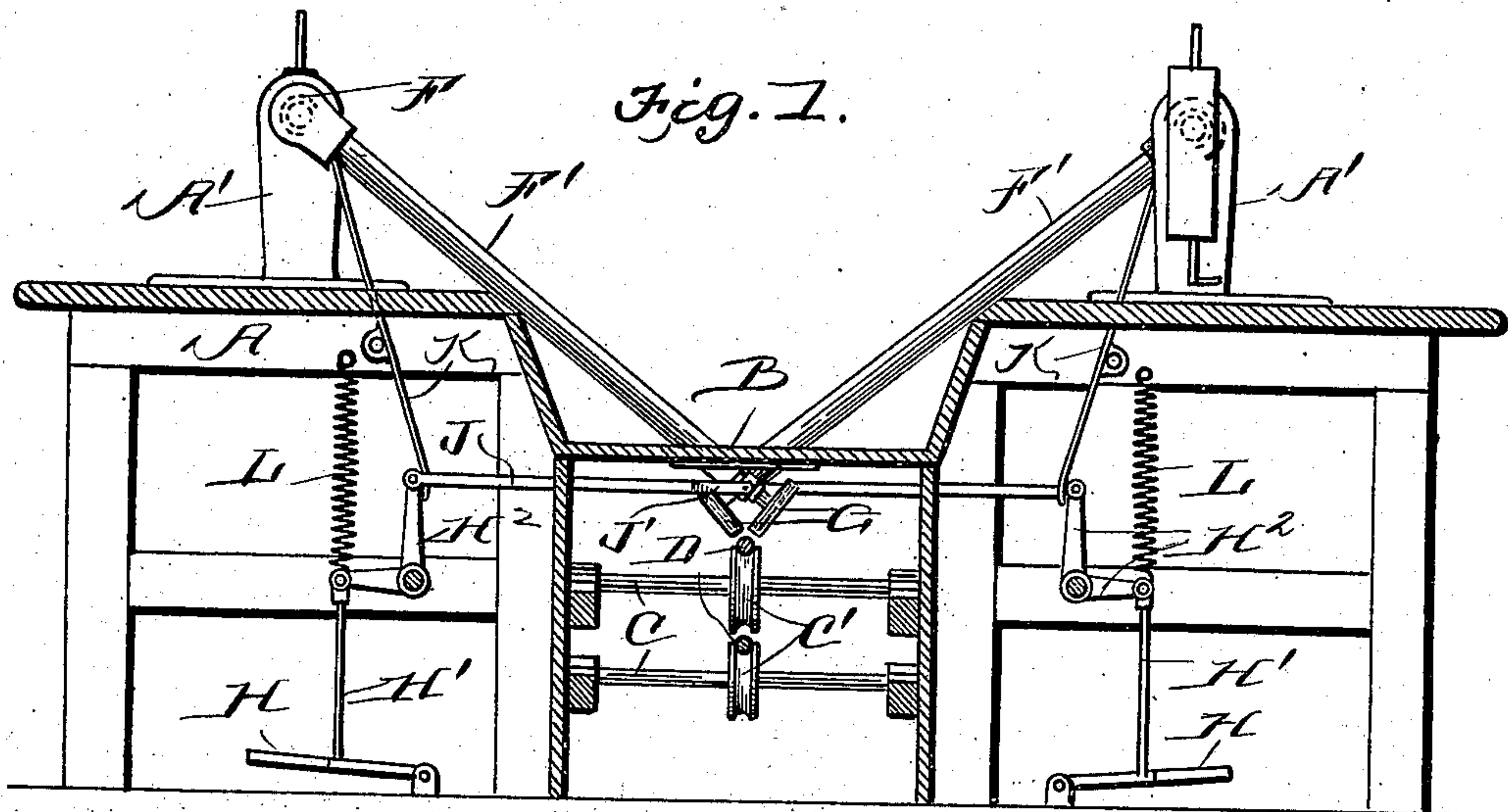


Fig. 3.

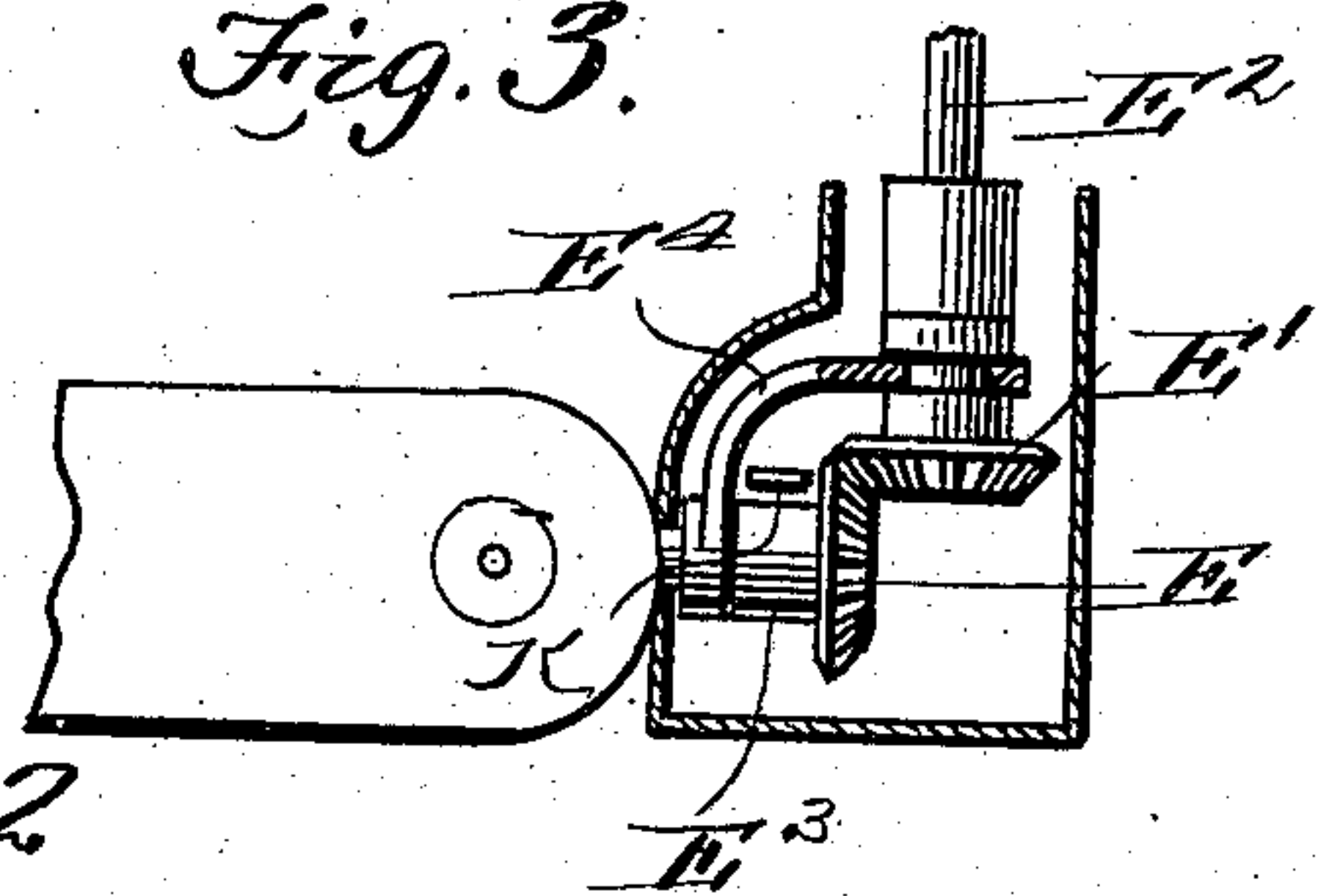
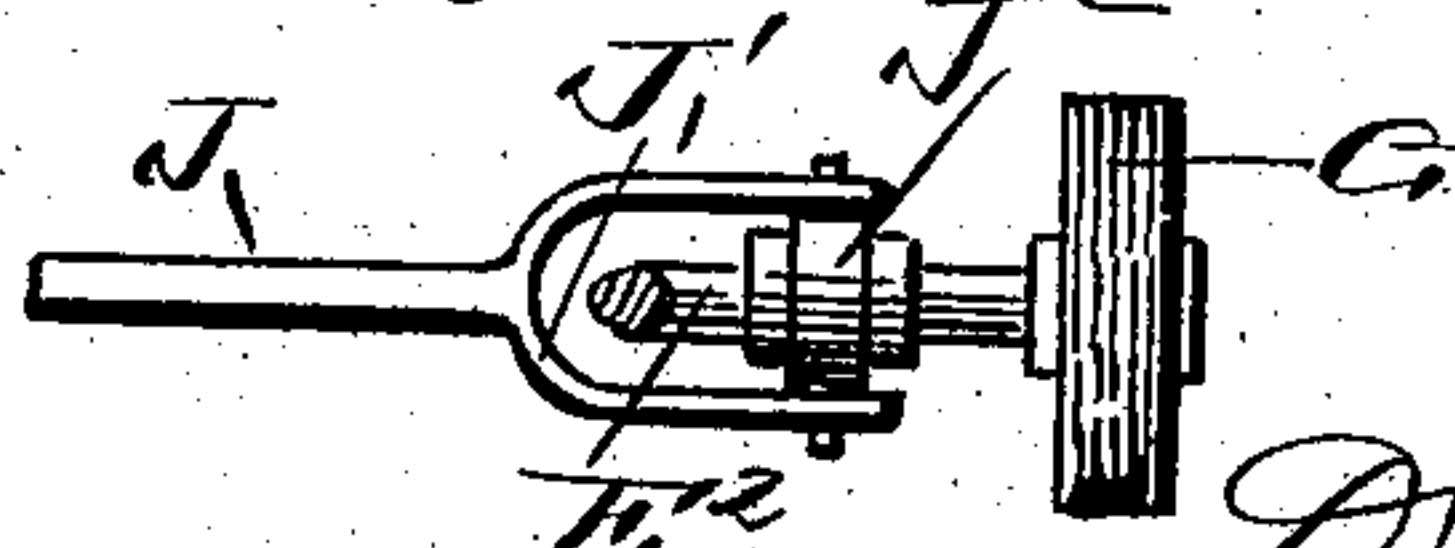


Fig. 4.



WITNESSES
M. D. Blouet.
C. B. M. Bath.

INVENTOR
A. B. COHN.
By Mearns & Brock
ATTYS.

UNITED STATES PATENT OFFICE.

ALEXANDER BERNARD COHN, OF NEW YORK, N. Y., ASSIGNOR TO A. B. C. MACHINE COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF DELAWARE.

POWER-TRANSMITTING DEVICE.

No. 881,881.

Specification of Letters Patent.

Patented March 10, 1908.

Application filed April 11, 1906. Serial No. 311,115.

To all whom it may concern:

Be it known that I, ALEXANDER BERNARD COHN, a citizen of the United States, residing at New York city, in the county and State of New York, have invented a new and useful Improvement in Power-Transmitting Devices, of which the following is a specification.

This invention relates to novel means for driving a plurality of sewing machines, the said machines being arranged in two parallel rows.

The object of the invention is to avoid the objectionable features due to the use of individual belts running to the drive or fly wheels of each machine.

It is common to place the machine in rows upon parallel tables with a trough between the tables into which the work falls and below this trough extends a long shaft provided with pulleys and belts run from each machine to the pulleys fixed upon the shaft, the one shaft driving all of the machine.

My invention consists of the novel features of construction hereinafter fully set forth, pointed out in the claims, and shown in the accompanying drawings, in which,

Figure 1 is a sectional view taken transversely through the tables and the trough adjacent the ends of two of the machines. Fig. 2 is a detail view illustrating in side elevation the driving mechanism, a portion of the table and trough and with certain other parts in section. Fig. 3 is a detail plan view of two intermeshing gears, the gear hood being in section. Fig. 4 is an enlarged detail view of a friction pulley and attached parts, a shaft being shown in section.

In these drawings A represent the tables upon which are arranged sewing machines A', and between the tables is arranged a trough B. Below the trough and extending from table to table are a plurality of shafts C, upon which are mounted pulleys C', and a belt or cable runs over these pulleys, as shown at D.

The usual driven wheel of the sewing machine is removed and replaced by a beveled gear E, which meshes with a bevel gear E' mounted upon the upper end of a rotatable shaft E², which extends downwardly through a suitable opening in the trough.

The beveled gears E and E' upon each machine, are inclosed by a suitable hood F, and the shaft E², is also inclosed by a sleeve F'.

At their lower ends each of the shafts E² are provided with a friction pulley G, adapted to be brought into contact with the belt or cable D.

To swing the shaft E² so as to move the friction pulley G, into and out of engagement with the belt, I provide beneath each machine, a pivoted foot lever H, which is connected to one member of a pivoted bell crank H², by a pivoted rod H'. A rod J, is pivoted at one end to the other member of the bell crank and the opposite end of the rod J, is bifurcated and the members of the bifurcation are pivotally connected to a collar J², within which the lower end portion of the shaft E² is journaled.

A spring metal brake bar K, is pivoted to the table frame between its ends and the lower end of the bar K, is connected to the rod J while the upper end is adapted to bear upon the shaft E³, to which the beveled gear E, is connected. A spring L, is connected at its upper end to the table A, and at its lower end to the bell crank H², in vertical alinement with the rod H'. To hold the beveled gears E and E', in operative engagement, with each other their respective shafts, are journaled in a curved bracket E⁴ as shown in Fig. 3.

It will be understood that the parts above described, for transmitting power from the belt D, to the machines A', are duplicated for each machine used, and that the number of machines is not material, and that the belt D, may be carried entirely around a room so that machines placed upon more than two tables, may be supplied with power from the same belt.

To start the machine, it is only necessary for the operator to depress the foot lever H, and the machine will run as long as the said lever is depressed, and the speed of the machine, can be decreased by permitting the lever H, to rise, thereby decreasing the bearing pressure of the friction pulley G on the belt D and permitting it to slip more or less. It will be understood that the spring L, by shifting the bell crank H², when the foot lever H is released, will throw the friction pulley G, out of engagement with the belt and will also throw the brake bar K, so that its free end portion will bear upon the shaft E³ and thus stop the machine.

Having thus fully described my invention,

what I claim as new and desire to secure by Letters Patent, is:—

1. In a power transmitting device, a plurality of shafts, arranged at an angle to each other, intermeshing gears carried by said shafts, one of said shafts having a free end portion and being movable, a friction pulley carried by the free end of the shaft, an endless traveling belt, a pivoted bell crank, a rod pivoted to one member of the bell crank, a collar mounted upon the movable shaft adjacent the friction pulley, one end of the said rod being pivotally connected to said collar, means for moving the bell crank to throw the friction pulley into engagement with the belt, and means for returning the bell crank to its normal position.

2. A power transmitting device comprising an endless belt, a shaft, a gear wheel thereon, a rotatable swinging shaft, a beveled gear carried by said shaft and meshing with the gear of the first mentioned shaft, a friction pulley fixed to the said swinging shaft, means for throwing said pulley into and out of engagement with the belt, and a brake bar carried by said means and adapted to be thrown into contact with the first mentioned shaft when the friction pulley is thrown out of engagement with the belt.

ALEXANDER BERNARD COHN

Witnesses:

B. ENGLANDER,
S. ENGLANDER.