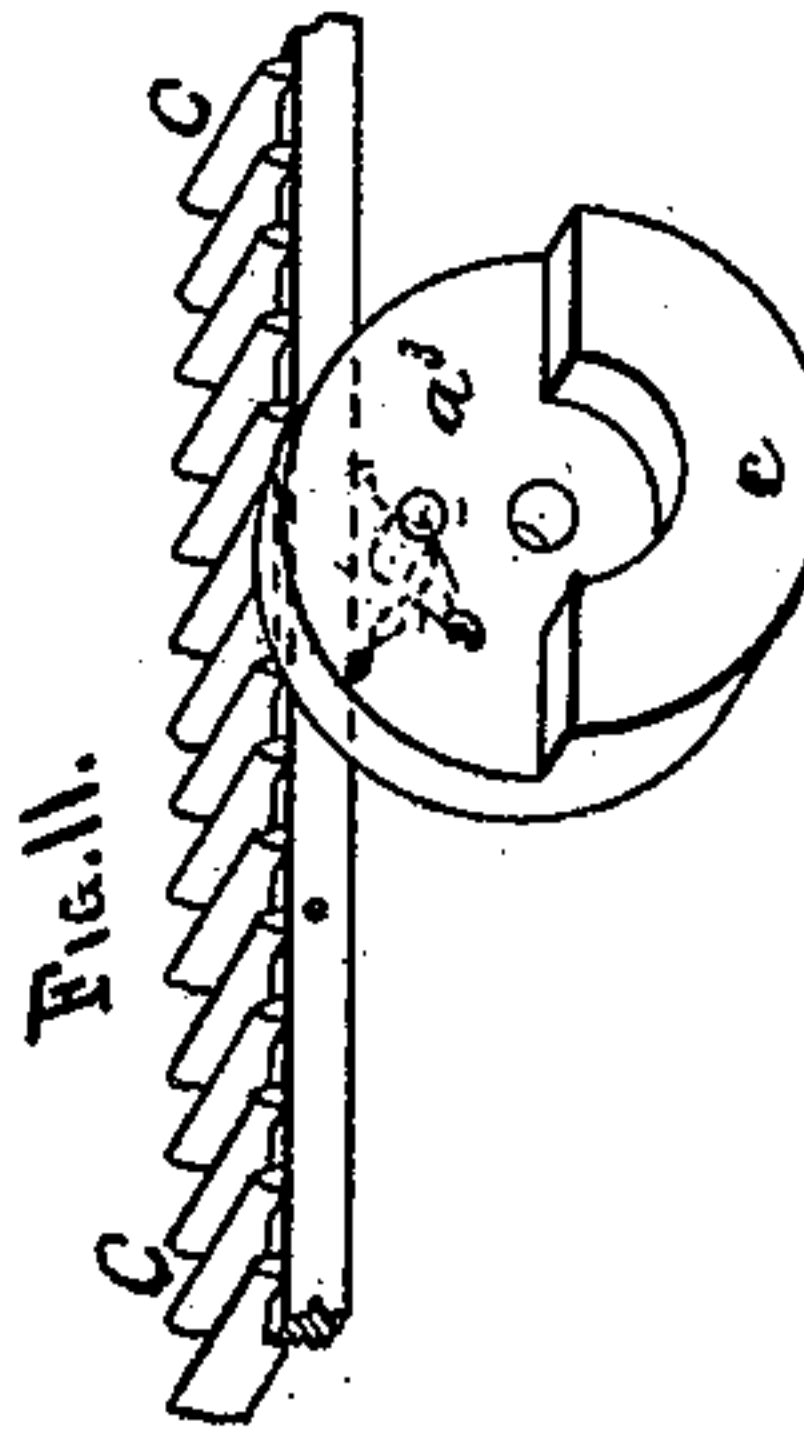
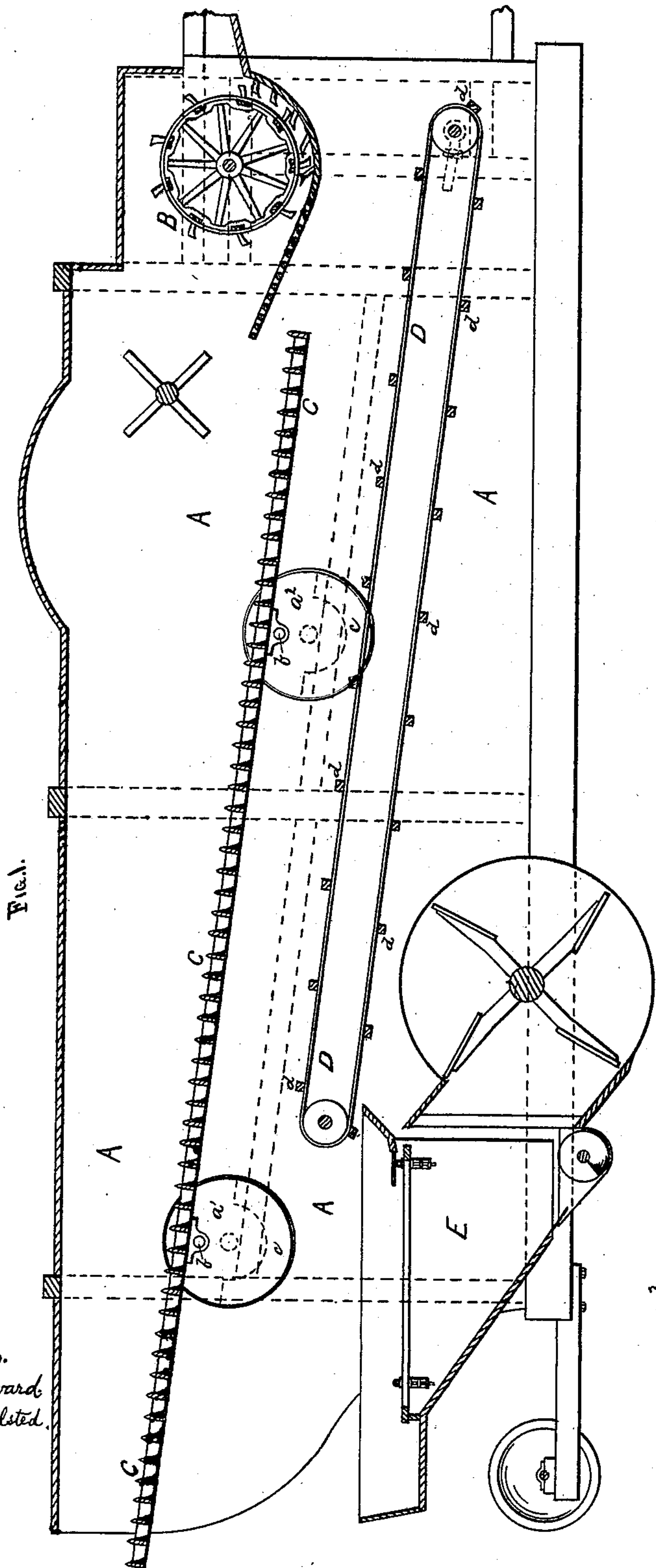


T. KENNY.
GRAIN-SEPARATORS.

No. 194,917.

Patented Sept. 4, 1877.



WITNESSES.
C. H. Woodward
John T. Halsted.

Terrence Kenny,
Inventor, By
Louis Fieser, Sec.
Attys.

UNITED STATES PATENT OFFICE.

TERRENCE KENNY, OF ST. PAUL, MINNESOTA.

IMPROVEMENT IN GRAIN-SEPARATORS.

Specification forming part of Letters Patent No. **194,917**, dated September 4, 1877; application filed June 7, 1877.

To all whom it may concern:

Be it known that I, TERRENCE KENNY, of St. Paul, in the county of Ramsey and State of Minnesota, have made certain new and useful Improvements in Thrashing - Machines, which improvements are fully set forth in the following specification and accompanying drawing, in which—

Figure I is a sectional side elevation. Fig. II is a perspective view of one of the rolling heads and a portion of the straw-carrier, showing the method of attaching them thereto.

This invention relates to that class of thrashing - machines in which the straw-carrier is mounted upon rolling heads or disks in the sides of the casing of the machine; and consists in attaching to each rolling head a counter weight or balance, to steady the action and prevent jarring, as hereinafter set forth.

A is the frame or casing of the machine; B, the cylinder; C, the straw-carrier; and $a^1 a^2 a^3$, the rolling heads, arranged in the usual manner in the sides of the casing of the machine, and to which the straw-carrier C is pivoted by pins b . c are counter weights or balances, cast in one piece with or otherwise secured to the disks a on the opposite side from the pins b , (see Fig. 2,) so that they will balance the weight of the straw-carrier and cause it to run steadily, and with little or none of the troublesome jarring and shaking so common in the old style of machine.

This is a very important feature of my invention, and its utility will be at once apparent.

In the old style of machine the weight of the straw-carrier, coming entirely upon one side of the heads a , causes a great strain thereon, and, by its very rapid motion, the

heads frequently become broken, and other parts of the machine disarranged, but by balancing them this difficulty is entirely avoided.

The attachment of the counter-weights to the revolving heads permits the complete rotation of the heads, which is precluded by the attachment to said heads of a grain-table, and enables the heads to include among their functions that of fly-wheels to steady the motion of the machine, whereby independent fly-wheels are rendered unnecessary, and economy of parts attained.

The counter-weights may be made adjustable upon the rolling heads, if desired, so as to adapt them to heavy or light grain, or different kinds of grain.

I am also enabled to use a much lighter head, shaft, and carrier-frame than it is possible to use where the heads are not balanced.

I am aware that counter-weights attached to crank-shafts, upon which a straw-carrier is mounted, and also straw-carriers mounted on rolling heads or disks, are old, and such I do not claim as my invention; but

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

The combination, with the straw carrier of a thrashing-machine, of the rolling heads $a a$, having the weights $c c$ attached directly thereto, as and for the purpose specified.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

TERRENCE KENNY.

Witnesses:

C. N. WOODWARD,
LOUIS FEESER.