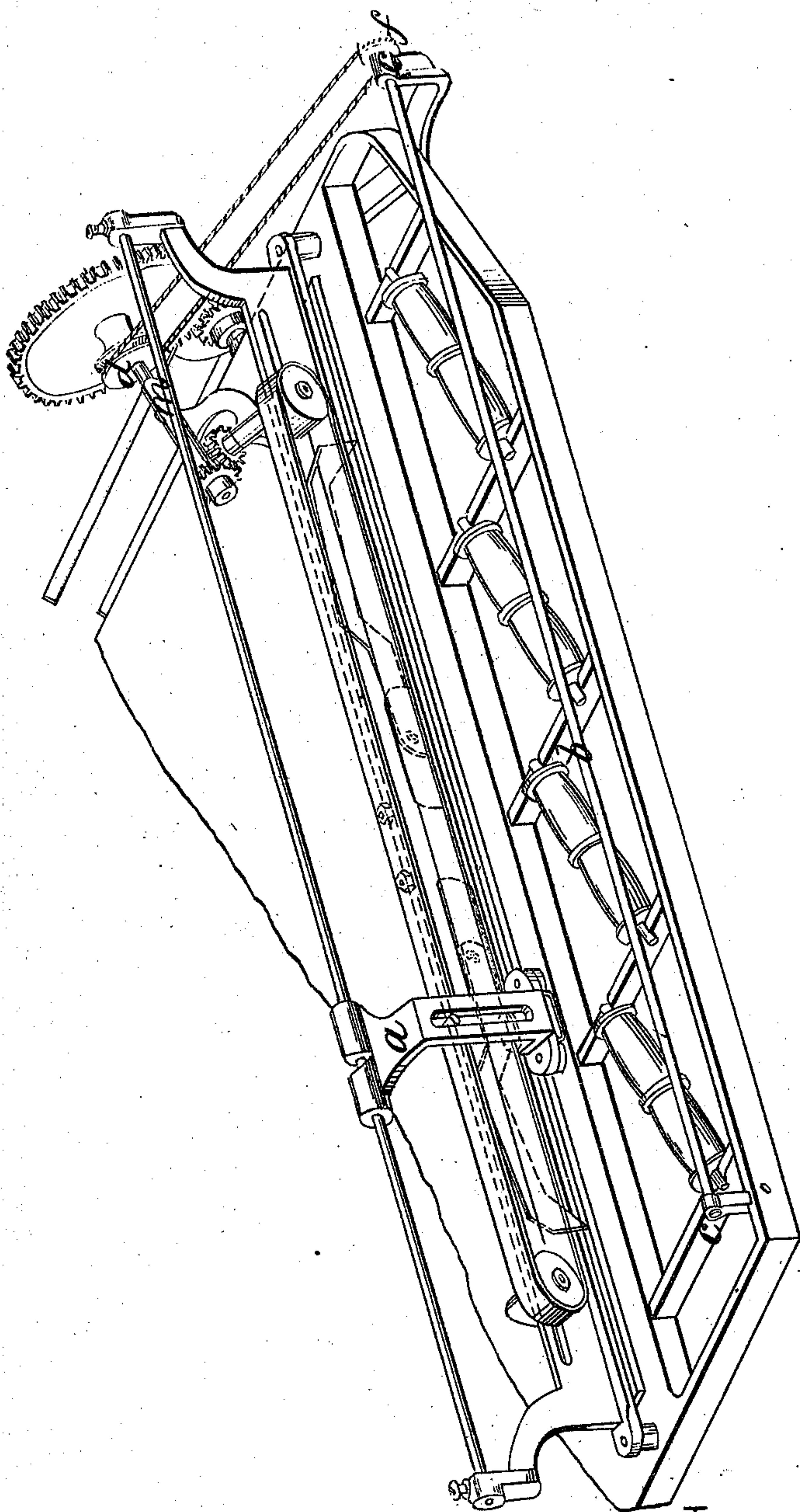


*T. Sampson,
Carding Machine.*

N^o 75,798.

Patented Mar. 24, 1868.



Witnesses

*W. Bailey
Chas. G. Page, Jr.*

Inventor.

*Thomas Sampson
by his attorney*

A. Pollok

United States Patent Office.

THOMAS SAMPSON, OF WANSKUCK, RHODE ISLAND, ASSIGNOR TO GEORGE S. HARWOOD AND GEORGE H. QUINCY.

Letters Patent No. 75,798, dated March 24, 1868.

IMPROVEMENT IN FEEDING-MECHANISM FOR CARDING-ENGINES.

The Schedule referred to in these Letters Patent and making part of the same.

TO WHOM IT MAY CONCERN:

Be it known that I, THOMAS SAMPSON, of Wanskuck, in the county of Providence, State of Rhode Island, have invented certain new and useful Improvements in Machines for Preparing Fibrous Substances for Spinning; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, which represents, in perspective, that portion of a card-feeding machine to which my improvements are applied.

My invention relates to a machine in general use for feeding cards, for which Letters Patent of the United States, No. 18,888, were granted to James Apperly and W. Clissold. This machine is generally attached to the second breaker and finisher-cards. Its action is too well known to need description, the feed being produced by means of a travelling-guide, which lays the sliver diagonally in continuous rows upon an endless-apron, which carries it to the cards.

The object of this "self-acting feeder" is to produce a more perfect and even distribution of the material, and a more uniform sliver than could be effected by the use of ordinary feed-mechanism. But it has, however, been found, by experience, that, when certain kinds of stock are used, the passage of the sliver as it enters the machine, over the stationary bar or shaft, in front of the feeder, causes a friction which tends to stretch the sliver between the cards, and consequently to produce uneven work.

The object of my invention is to obviate this difficulty, and, to this end, it consists of the combination, with the feed-mechanism, of a revolving shaft, mounted in the front of the machine, and actuated so as to travel at about the same rate of speed as the sliver, which passes over it to the feed or traversing-rolls. As the shaft thus moves with the sliver, instead of remaining stationary, there is no friction produced, and consequently the stretching of the sliver before mentioned is prevented.

My invention will be readily comprehended by reference to the accompanying drawings, in which only so much of the machine is represented as is necessary to illustrate the same.

The sliver, in its progress to the travelling-guide *a* of the feeder, passes over a shaft, *b*, in front of the frame. This shaft has been heretofore made stationary, thus giving rise to the evils above mentioned. To obviate such evils, I mount the shaft in bearings *c c*, formed in the frame in such manner that it is rendered capable of revolving. The power for actuating the shaft can be taken from any part of the working-gear. As above said, the shaft should travel at about the same rate of speed as the sliver which passes over it, and, in order to communicate this motion, I connect it with the pulley *d*, mounted upon the shaft *m*, which carries the gear for effecting the movement of the endless band, which carries the pin by which the traversing-guide is moved to and fro. The connection is made by means of an endless band, which passes from the pulley *d*, over the smaller pulley *f*, mounted on the end of the shaft *b*. These wheels or pulleys bear such relation in size to each other, that the rate of speed at which the shaft revolves is about the same as that at which the traversing-guide moves. It is needless to say, however, that this movement may be communicated to the roll from any other part of the driving or motor-mechanism, and by any suitable means.

Having now described my invention, and the manner in which the same is or may be carried into effect, what I claim, and desire to secure by Letters Patent, is—

In a machine such as described, the application and use of a revolving shaft, mounted in the front of the machine, at or near the point where the sliver is delivered to the traversing-guide, substantially as and for the purposes herein shown and set forth.

In testimony whereof, I have signed my name to this specification before two subscribing witnesses.

Witnesses:

WM. WHITCOMB,
DAN'L R. CLAPP.

THOMAS SAMPSON.