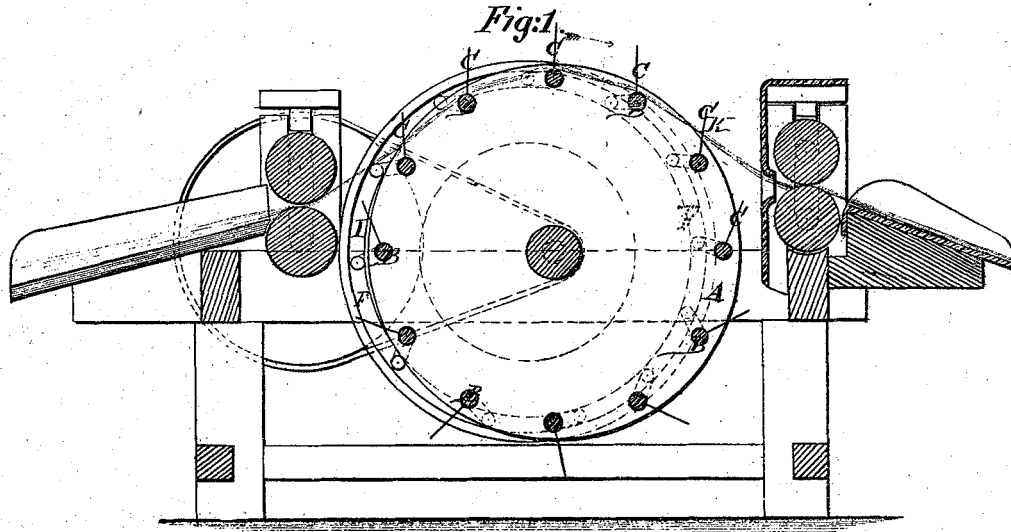


*Davis & Hoover,*

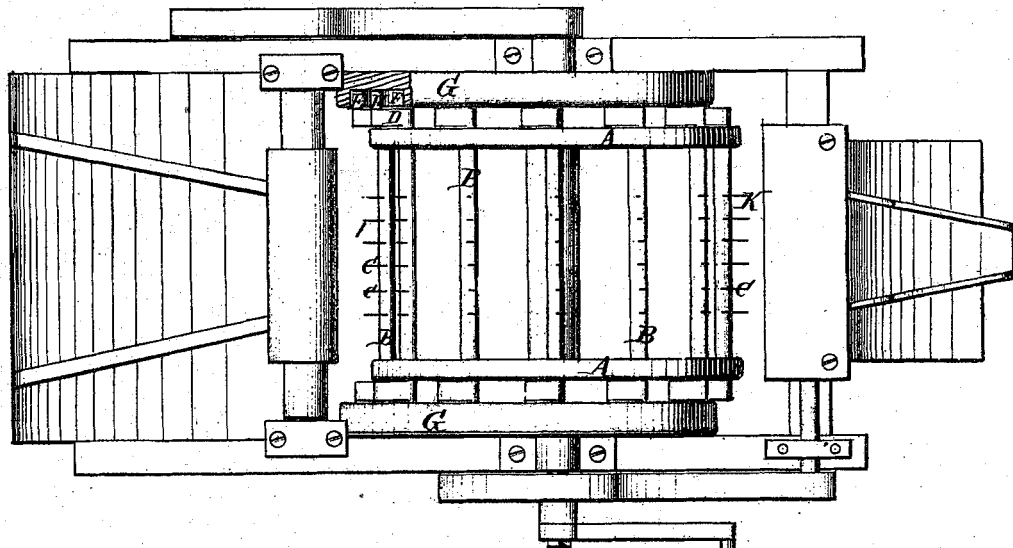
*Drawing Frame.*

*No. 100,130.*

*Patented Aug. 9, 1870.*



*Fig: 2.*



Witnesses:  
*M. Vorlaender*  
*Alex. Fr. Robert*

Inventor:  
*Geo. Davis*  
*J. R. Hoover*  
PER *Wm. C. Hoover*  
Attorneys.

# UNITED STATES PATENT OFFICE.

GEORGE DAVIS AND JOHN R. HOOVER, OF ELIZABETH PORT, NEW JERSEY.

## IMPROVEMENT IN DRAWING-FRAMES FOR HEMP, &c.

Specification forming part of Letters Patent No. **106,130**, dated August 9, 1870.

*To all whom it may concern:*

Be it known that we, GEORGE DAVIS and JOHN R. HOOVER, of Elizabeth Port, in the county of Union and State of New Jersey, have invented a new and Improved Hemp-Drawing Frame; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

This invention relates to improvements in machines for drawing hemp; and consists in the peculiar construction and arrangement of the devices for that purpose, as hereinafter described.

Figure 1 is a longitudinal section of a drawing-frame constructed according to our improvements, and Fig. 2 is a plan view of the same.

Similar letters of reference indicate corresponding parts.

A represents the rotary disks, and B the oscillating arms, carrying the comb-teeth C, and mounted in the said disks so as to turn therein. These arms have cranks D at one or both ends, with pins E, which engage in annular grooves F in disks G, fixed one at each end of the comb-cylinder, and set eccentrically thereto, as shown in the drawing, for causing the arms B to oscillate as they revolve, the

oscillation being caused by the crossing of the orbits of the pins F and the arms B.

The axles of the disks G, being set on the receiving side of the axis of the cylinder, will cause the teeth C, when ascending to enter the fiber, as at I, to pitch forward, so as to stand nearly perpendicular to the line of the fiber, so as to enter in the most direct and easy manner—that is to say, endwise; and the same arrangement of the disks causes the teeth to pitch backward at K in going down, so as to draw away from the fiber, also in an endwise direction.

The improvement is applicable to machines for drawing other fibrous substances.

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

The rotary disks A A and comb-bars B, provided with the cranks D E, in combination with the stationary grooved disks G G, placed eccentrically to the disks A, and all constructed and arranged as and for the purpose specified.

The above specification of our invention signed by us this 16th day of April, 1870.

GEORGE DAVIS.

JOHN R. HOOVER.

Witnesses:

GEO. W. MABEE,

ALEX. F. ROBERTS.