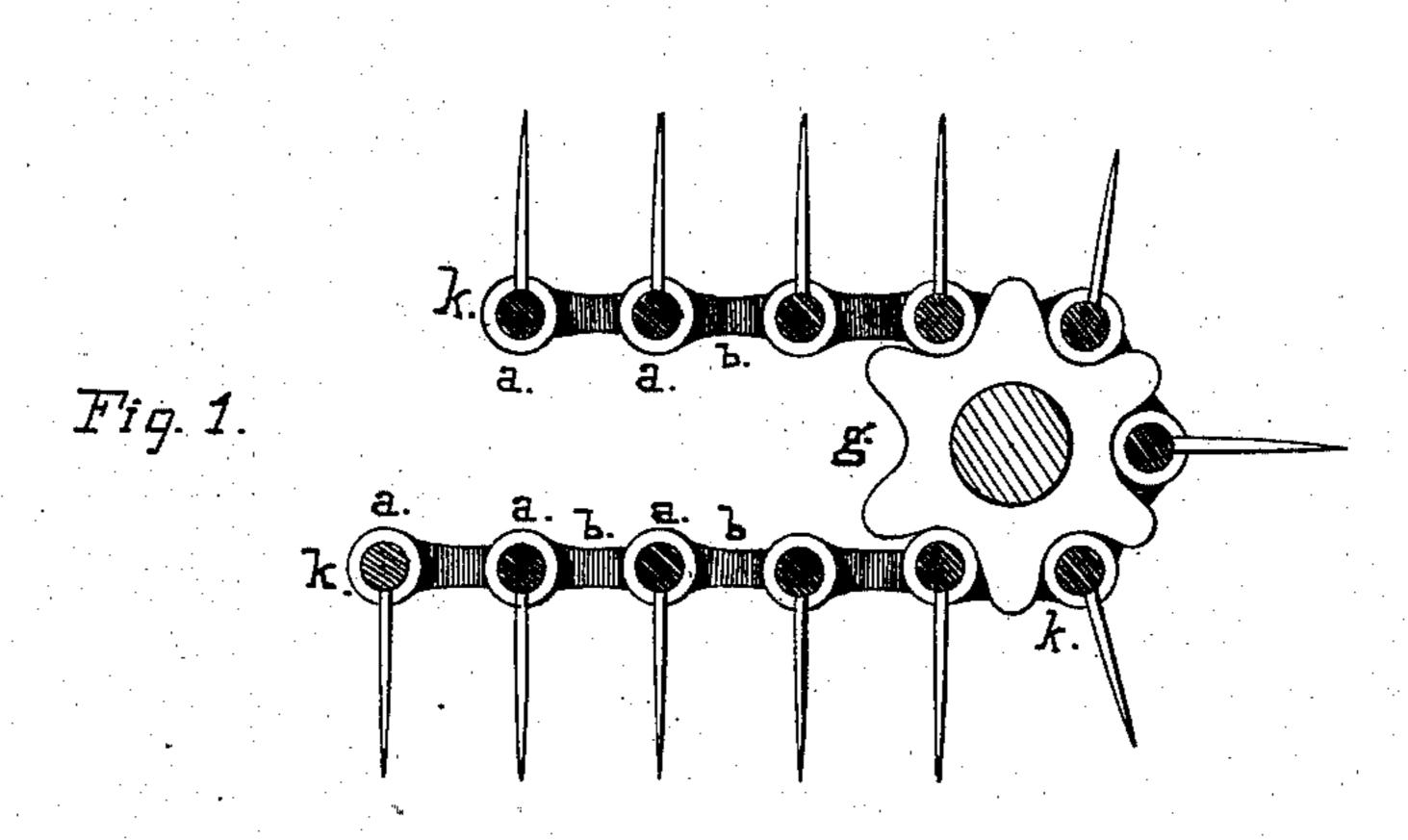
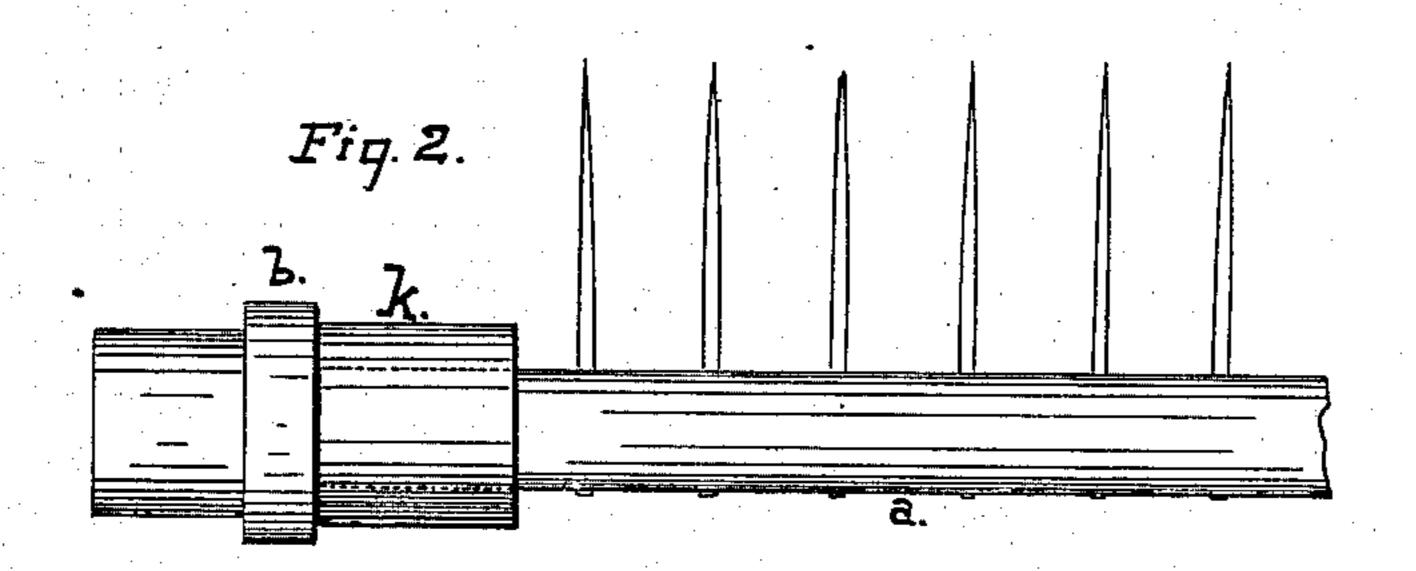
(No Model.)

F. MAHLER. Machine for Drawing Flax.

No. 239,614.

Patented April 5, 1881.





Witnesses:

Win Allank

J. Boone.

Inventor:

Drank Mahlen, by his Hillys.

United States Patent Office.

FRANK MAHLER, OF SAN FRANCISCO, CALIFORNIA.

MACHINE FOR DRAWING FLAX.

SPECIFICATION forming part of Letters Patent No. 239,614, dated April 5, 1881.

Application filed May 10, 1880. (No model.)

To all whom it may concern:

Be it known that I, FRANK MAHLER, of the city and county of San Francisco, and State of California, have invented certain new and 5 useful Improvements in Machines for Drawing Flax; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompa-

nying drawings.

My invention relates to that class of machines for hackling hemp and flax in which an endless traveling comb is used. In this class of machines the combing-teeth are secured in bars, and the bars are connected to-15 gether parallel with each other by means of links at each end. This endless belt is then driven by chain or sprocket wheels, around which it passes. A machine of this kind is represented in the Letters Patent No. 95,462, 20 which were issued to John Good on the 5th day of October, 1869. In this machine it will be noticed that the linked ends of the bars pass around the sprocket-wheels. The difficulty with this arrangement has been that the 25 ends of the bars, in passing over the arms of the sprocket-wheels, wear away so fast when the comb is run at a high speed that they require to be cut off and renewed quite often, thus causing considerable annoyance and ex-30 pense. My invention is intended to remedy this difficulty by supplying a wearing sleeve or collar for the end of each bar or rod, which can be readily renewed when sufficiently worn, thus leaving the end of the rod intact.

Referring to the accompanying drawings, Figure 1 is a transverse section, in detail, showing a section of the endless traveling comb and one of its sprocket-wheels. Fig. 2 is a detail view, showing one end of the comb hav-40 ing my improvement applied thereto.

Let a a represent the parallel rods or bars to which the combing teeth are secured. These

bars or rods are connected together into an endless belt by placing them parallel with each other and connecting their ends together 45 by means of links b b. The belt thus formed passes around two shafts at the required distance apart, and on each of these shafts a sprocket-wheel, g, is secured, over and around which the linked ends of the bars pass, and 50 by means of which the belt is driven. As the belt passes around these wheels gg, the ends of the bars a come in contact with the sprocket-arms of the wheels, and the continual friction thus made, when the belt is run at a high 55 speed, wears them away quite fast, as hereinbefore stated.

Instead of allowing the friction and wear to come directly upon the ends of the rods or bars, I protect them by placing a sleeve or col- 60 lar, k, upon both ends of each rod, so that these sleeves or collars will receive the wear of the sprocket-arms. This sleeve or collar may be shrunk on tight, or it may be placed loosely on the rod so as to turn. In either 65 case, when the collars have become worn nearly through, they can be removed and new ones substituted in a very short time, and with but little trouble.

Having thus described my invention, what I 70 claim, and desire to secure by Letters Patent,

In machines for hackling hemp and flax in which an endless moving comb is driven by sprocket-wheels, the renewable friction or 75 wearing collar or sleeve k, applied upon the ends of the comb bars or rods a a, substantially as and for the purpose described.

In witness whereof I have hereunto set my hand and seal.

FRANK MAHLER.

Witnesses:

Julius Frellöhr, JOSEPH KOHLBALER.