

(No Model.)

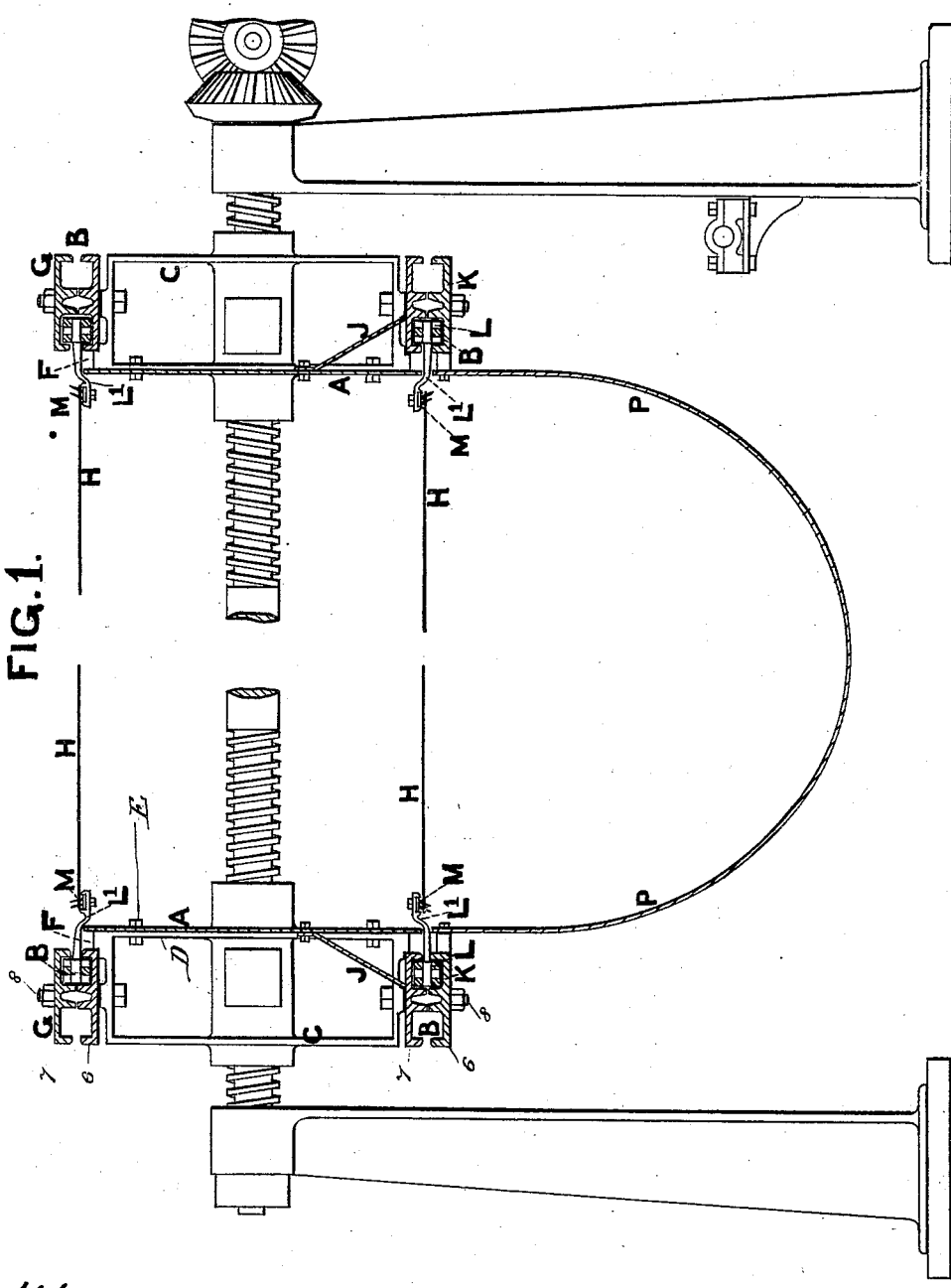
3 Sheets—Sheet 1.

J. & W. HORTON.
CLOTH STRETCHING MACHINE.

No. 544,098.

Patented Aug. 6, 1895.

FIG. 1.



Witnesses
Abraham Reed
C. Ward

Inventors
Joseph Horton
William Horton

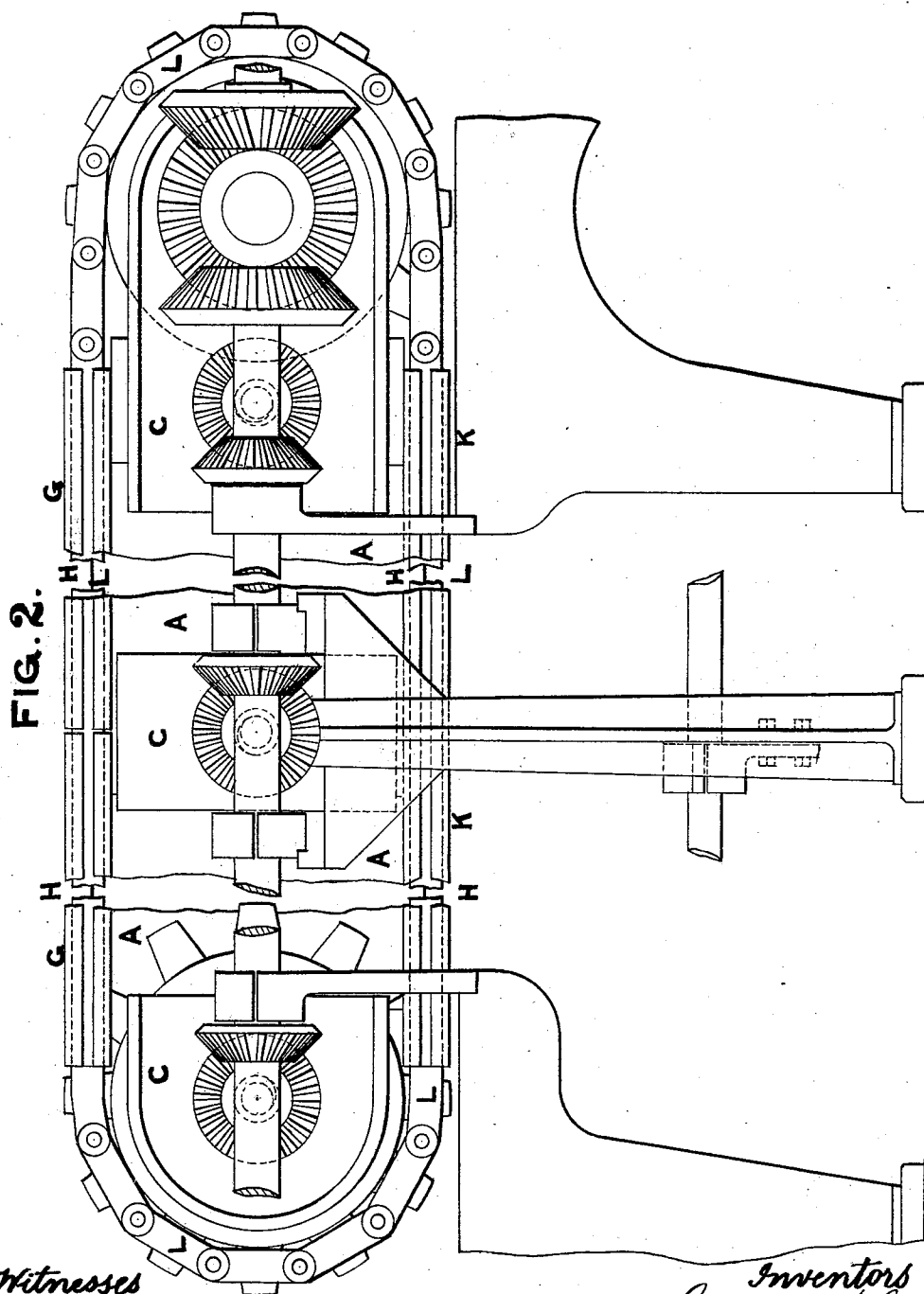
(No Model.)

3 Sheets—Sheet 2.

J. & W. HORTON.
CLOTH STRETCHING MACHINE.

No. 544,098.

Patented Aug. 6, 1895.



Witnesses
Abraham Reed
C. Ward

Inventors
Joseph Horton
William Horton

(No Model.)

3 Sheets—Sheet 3.

J. & W. HORTON.
CLOTH STRETCHING MACHINE.

No. 544,098.

Patented Aug. 6, 1895.

FIG. 3.

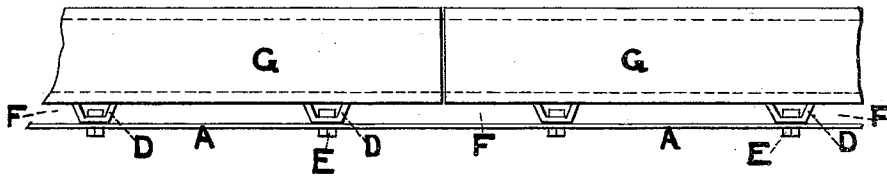


FIG. 4.

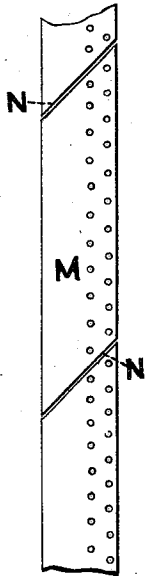
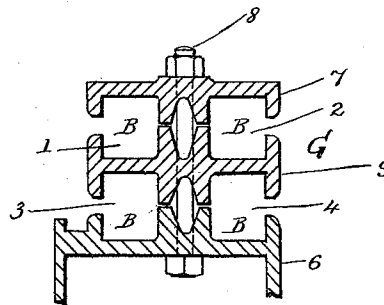


FIG. 5.



Witnesses
Abraham Reed
C. Ward

Inventors
Joseph Horton
William Horton

UNITED STATES PATENT OFFICE.

JOSEPH HORTON AND WILLIAM HORTON, OF COPLEY, ENGLAND.

CLOTH-STRETCHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 544,098, dated August 6, 1895.

Application filed November 16, 1894. Serial No. 528,984. (No model.) Patented in England March 30, 1889, No. 5,459.

To all whom it may concern:

Be it known that we, JOSEPH HORTON and WILLIAM HORTON, subjects of the Queen of Great Britain, residing at Copley, near Halifax, in the county of York, England, have invented new and useful Improvements in Tentering or Cloth-Stretching Machines for Textile Fabrics, of which the following is a specification.

10 Letters Patent for this invention have been obtained in England, No. 5,459, dated March 30, 1889.

Our invention relates to the ordinary tentering-machines for drying textile fabrics; and it consists in improvements whereby all dirt and grease are prevented from coming in contact with the piece or fabric being operated upon.

Figure 1 is a cross-sectional elevation of the 20 improvements applied to an ordinary tentering-machine. Fig. 2 is a side elevation of part of a tentering-machine, which machines are made of various lengths. Fig. 3 is a plan of one of the top rails, showing the method of 25 fixing the extended partition. Fig. 4 is an enlarged detail of the plates or gills M. Fig. 5 shows a modification of the reversible rails.

The improvements consist in forming or fixing an extended partition A at each inner side 30 of the chain-race B, and the whole length of the machine C, this partition being secured in position by means of lugs or brackets D (cast upon the top and bottom rails) and bolts E, a space F being left between the top rail 35 or race G and the partition A, whereby all dirt and grease are prevented from coming in contact with the fabric H while being dried. Downwardly and outwardly inclined plates J are secured to the plates A, under the top race 40 or rail, to prevent such dirt or grease from dropping onto the bottom race.

An improved form of reversible rails G and K is employed, having two or four recesses or races B for the chain L, which gives two or 45 four times the wear of the ordinary rails. Arms L' project from the chains L and extend over the partitions A and have the edges of the cloth secured to them.

The form of the rail with four races 1 2 3 4 is shown in Fig. 5. The rail with two races 50 is made in two parts 6 and 7, coupled together by a central vertical bolt 8. An intermediate part 9 is interposed between the parts 6 and 7 when the rails are required to have four 55 races. The rails are reversed by turning them around as their edges become worn by contact with the chains in their races.

The plates or gills M, which hitherto have had straight joints, and consequently broken lines of pins, are now made with the joints 60 beveled or angular, as at N, by which means a continuous and even row of pins is obtained.

P is a plate to inclose a space for hot air below the cloth, as required in tentering-machines for some classes of fabrics. 65

The action of the machine is as ordinary.

What we claim as the invention, and desire to secure by Letters Patent, is—

1. In a cloth stretching machine, the combination, with the upper and lower rails, connected together and provided with chain races 70 and inwardly projecting brackets D; of the vertical partition plates A secured to the said brackets one on each side of the machine leaving spaces F between them and the said 75 rails the inclined guide plates J secured to the lower rails and to the plates A under the said spaces; and the chains sliding in the chain races and provided with arms for supporting the cloth, substantially as set forth. 80

2. In a cloth stretching machine, a reversible chain rail formed of an upper part and a lower part, and central bolts 8 securing the said parts together, separate races being 85 formed by the said parts, one on each side of the central bolts, substantially as set forth.

In testimony whereof we affix our signatures in the presence of two witnesses.

JOSEPH HORTON.
WILLIAM HORTON.

Witnesses:

JOHN E. WALSH,
ABRAHAM REED.