

S. W. Herrick & C. G. Gilbert, Jr.
Preparing Floor Oil Cloth.
N^o 67,195. Patented Jul. 30, 1867.

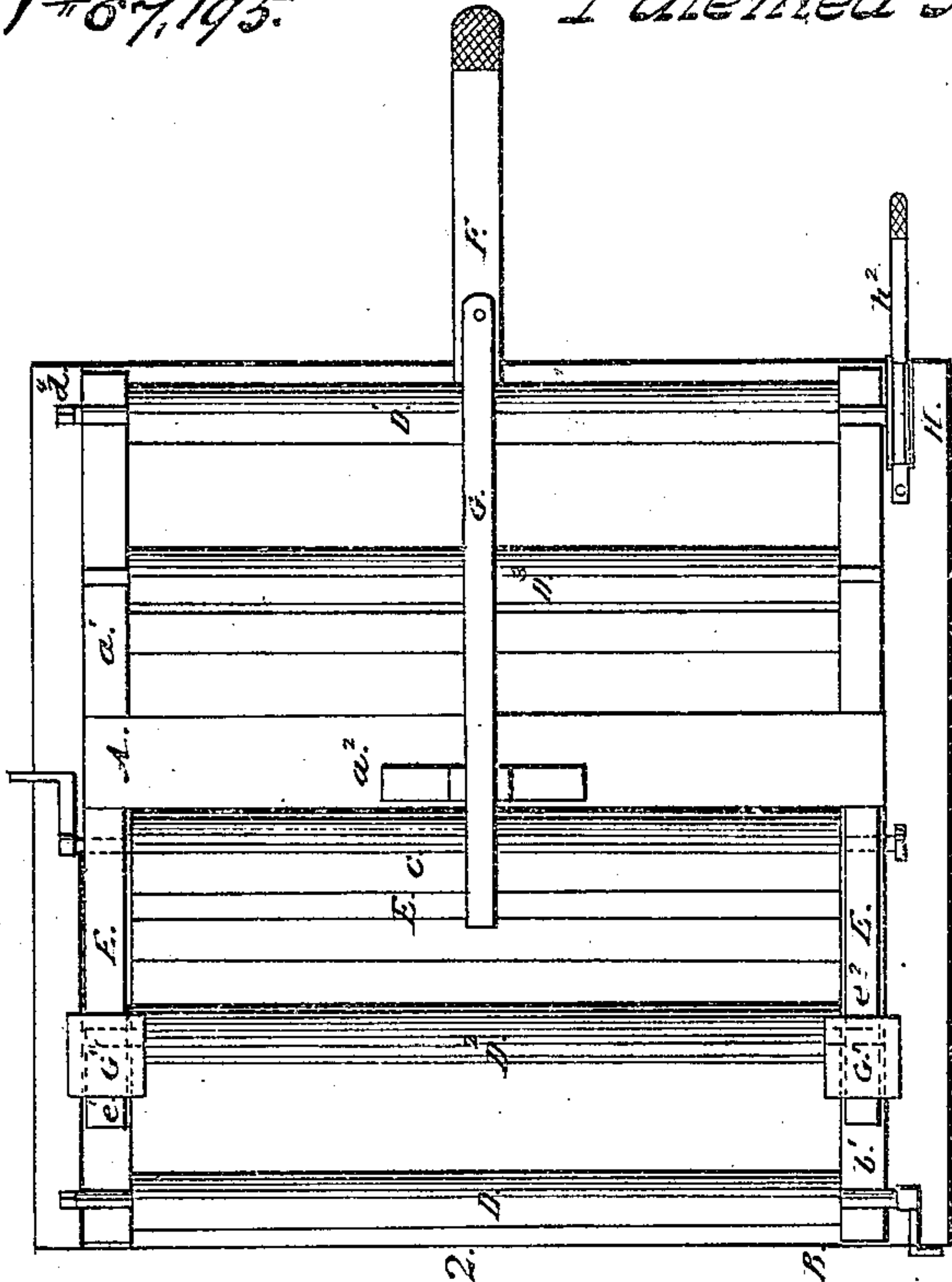


Fig. 2.

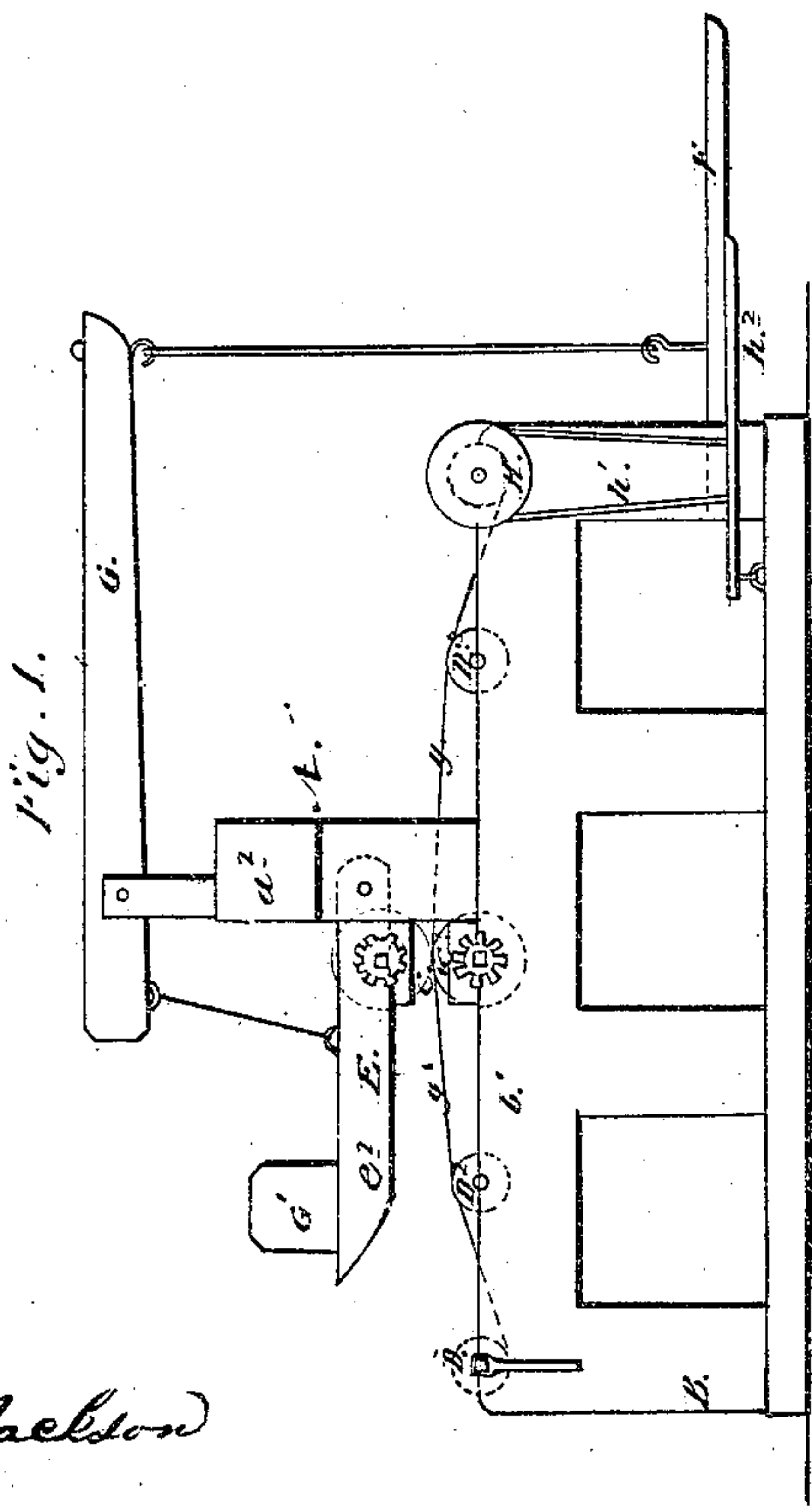


Fig. 1.

Witnesses;
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United States Patent Office.

SETH W. HERRICK AND CHARLES G. GILBERT, JR., OF SALEM, NEW JERSEY.

Letters Patent No. 67,195, dated July 30, 1867.

IMPROVEMENT IN MACHINERY FOR PREPARING FLOOR OIL-CLOTH.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that we, SETH W. HERRICK and CHARLES G. GILBERT, Jr., of Salem, in the county of Salem, and State of New Jersey, have invented a new and improved Machine for Preparing Burlaps and other Fabrics in the Manufacture of Floor, Carriage, Table, and other Oil-Cloth; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side elevation, and

Figure 2 a plane view of the said machine—

Like letters of reference indicating the same parts when in the different figures.

In the manufacture of floor oil-cloth, &c., the foundation fabric, after being sized with glue, has heretofore been stretched in a frame, to remove wrinkles preparatory to and whilst coating it with the foundation paint. The object of our invention is to produce a machine whereby a permanently even and flat surface can be more readily given to the burlap or other fabric used in the manufacture of floor, carriage, table, and other oil-cloth; and our said invention consists in the peculiar arrangement and combination of rollers and heated pressing-cylinders operating together, substantially as hereinafter described and set forth.

In the drawings, A B are the supporting-frame of the machine; C C' the pressing-cylinders, and D D¹ D² the rollers. The rollers D and the lower cylinder C' rotate freely on their journal-bearings in the same horizontal plane on the upper side rails a¹ b' of the frame A B, and are arranged parallel to and at about equal distances from each other, as seen in fig. 2. The cylinder C is suspended by its journals in a swinging frame, E, so as to be directly above and parallel to the lower cylinder C', and so that it can when weighted, as hereinafter described, be readily raised from and lowered into contact with the latter by the foot of the attendant pressed down upon a treadle, F, which is hung from a lever, G, that is coupled to the swinging frame E, and has its fulcrum in a bearing fixed on a raised portion, a², of the said frame. Both of the cylinders C C' are made of cast iron or other metal, and are constructed so as to admit of being heated by steam or otherwise. Upon each of the two projecting arms e¹ e² of the swinging frame E a heavy block of cast iron, G', is adjustably secured, for the purpose of giving a proper degree of pressing power to the cylinder C. On one journal of the roller D¹ a grooved friction-pulley, H, is fixed, and over the pulley a metal strap, h¹, fits and passes down into connection with the treadle h², whereby the attendant can readily increase the friction of the said roller D¹, and on one of the journals of the roller D a crank-handle is attached, whereby another attendant can give it rotary motion.

Operation.

The fabric which is to be prepared or made even and flat, after it has been sized, is first wound tightly around upon the roller D¹ by using a crank-handle to be applied on its journal d¹. The free end of the cloth is then carried from its under side over the roller D², then between the two cylinders C C', and over the roller D² to the under side of the roller D, where it is fastened by an overlap, as indicated by the faint lines y y in fig. 1. The cylinders having been made sufficiently hot, one of the attendants now winds the fabric slowly upon the roller D from the roller D¹, causing it to pass between the hot rotating cylinders C C' under the pressure of the upper cylinder C and the weights G' G' of the swinging frame E, thus mashing down all the lumps and removing the wrinkles and other inequalities of the fabric, and therefore making it permanently even and flat. And should a "wave" be formed in the cloth in front of or just before the cylinders, the attendant who has control of the unwinding roller D¹ and the cylinder C places his foot upon the treadle h², and thus increasing the friction of the latter while the winding roller D is kept in motion by its attendant, and the weighted cylinder being at the same time slightly raised by means of the treadle F or lever G the "wave" in the cloth is readily removed, and immediately after the said result has been produced the weighted cylinder C and roller D are allowed to return to their former conditions.

This is a very simply-operating machine for the purpose, and effectually prepares the cloth for the immediate operations of painting and printing without requiring the use of a stretching-frame, as heretofore.

Having thus fully described our improved machine, what we claim as our invention therein, and desire to secure by Letters Patent, is confined to the following, viz:

We claim the described arrangement of the rollers D and D¹, the cylinders C and C', the friction-pulley H, with its strap h¹ and treadle h², and the weighted swinging frame E, the said parts being combined together in a suitable frame, A B, so as to operate substantially as and for the purpose described.

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Witnesses:

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