

J. C. GRAY.
Machine for Making Carpet-Linings and Similar
Fabrics.

No. 222,037.

Patented Nov. 25, 1879.

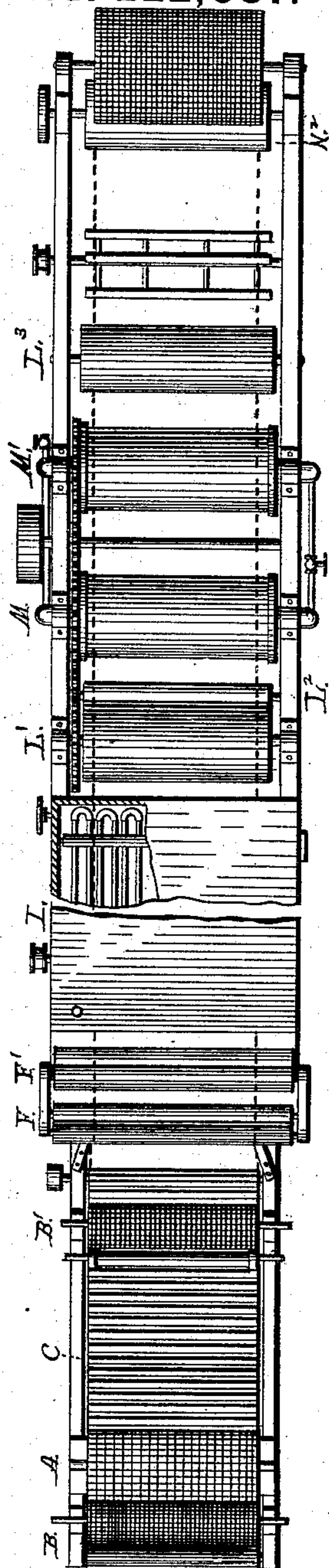


FIG. 2.

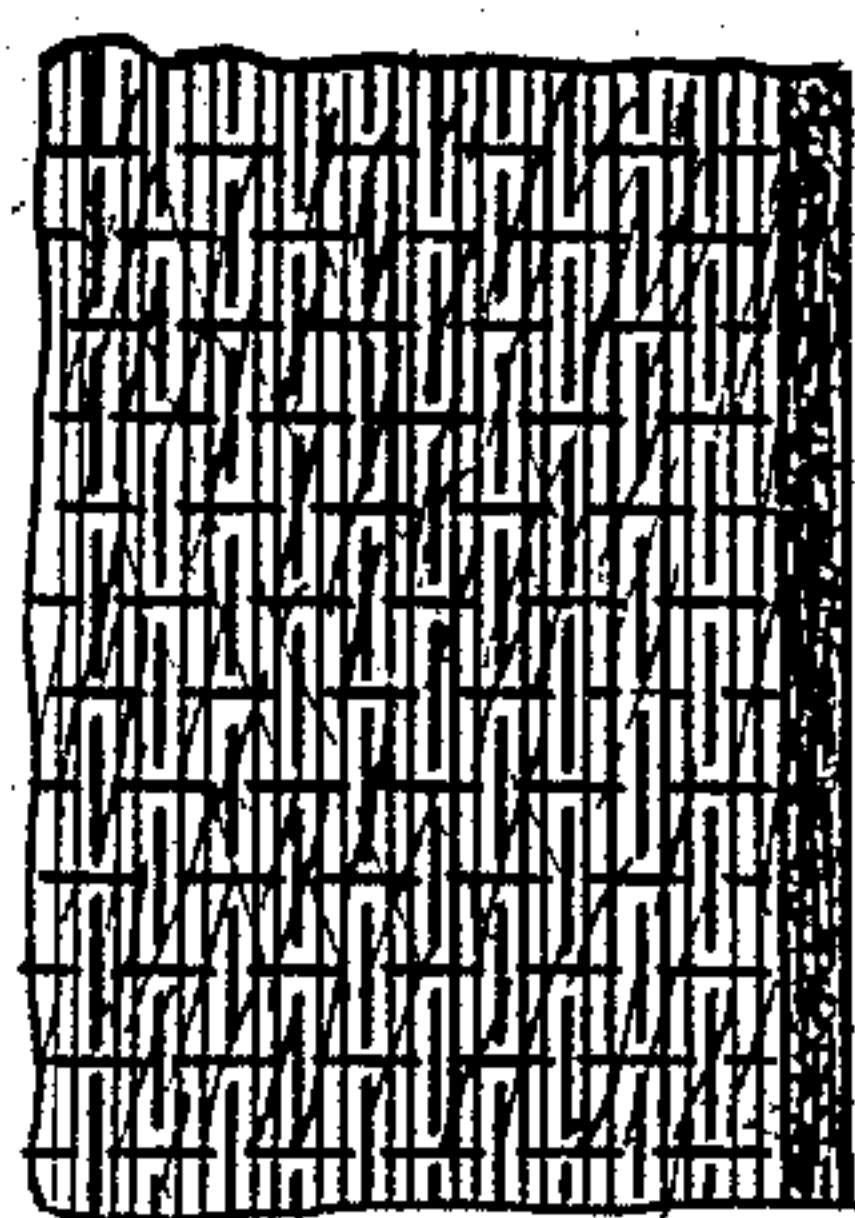


FIG. 4.

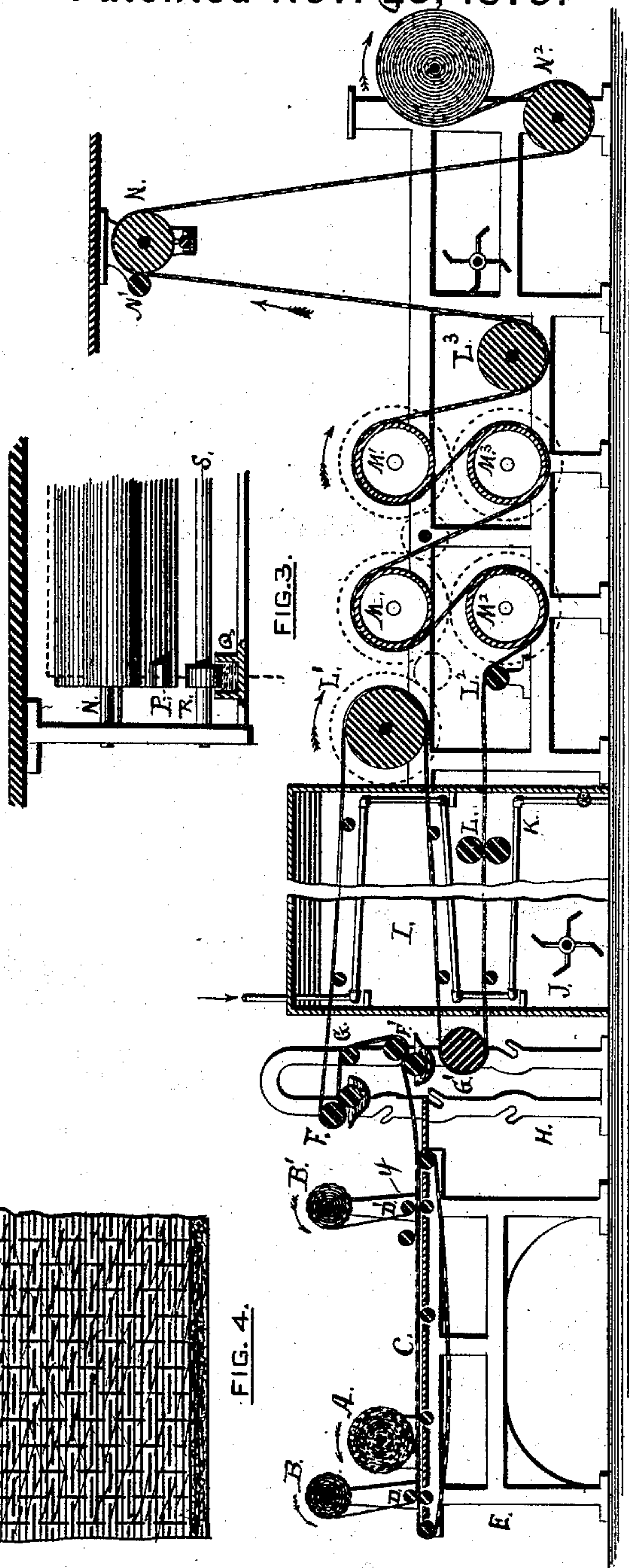


FIG. 1.

FIG. 3.

WITNESSES.

E. F. Warner,
Joseph T. Rich

INVENTOR.

John C. Gray
By his Atty. Walter B. Vincent

UNITED STATES PATENT OFFICE.

JOHN C. GRAY, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN MACHINES FOR MAKING CARPET-LININGS AND SIMILAR FABRICS.

Specification forming part of Letters Patent No. **222,037**, dated November 25, 1879; application filed October 13, 1879.

To all whom it may concern:

Be it known that I, JOHN C. GRAY, of Providence, in the State of Rhode Island, have invented a new and useful Machine for Making Carpet-Linings and Similar Fabrics; and I do hereby declare that the following specification, taken in connection with the drawings making a part of the same, is a full, clear, and exact description thereof.

Figure 1 is a side elevation of my machine. Fig. 2 is a top view of the same. Fig. 3 is a view of the measuring-rolls. Fig. 4 shows a sample of batting.

The object of my invention is to produce a machine in which the cotton may be covered, the covering sized and dried, and the whole finally ironed and measured; and it consists in the mechanism hereinafter described.

My invention relates to the production of cotton-batting, which is then covered upon both sides with thin cloth or netting instead of paper.

The cotton-batting now in use is covered with a thick brittle paper, which not only adds very much to its weight, but easily becomes broken and torn, after which the batting cannot be handled without injury, and soon becomes worthless.

In my invention, Figs. 1 and 2, A is a roll of cotton-lap; B and B', rolls of cloth or netting; C, an endless apron; and D D', rolls for spreading the netting, all supported by a suitable frame, E. F and F' are pairs of sizing-rolls, and G and G' friction-rolls, all upon a frame, H. I is a drying-chamber, provided with a fan, J, and steam-pipes K. L is a pair of compressing-rolls. L' L² L³ are friction-rolls, and M M' M² M³ are heated calendering or ironing rolls. N N' are measuring-rolls; N², a friction-roll, and O a roll to receive the completed goods.

Motion being imparted to the apron and the different rolls by suitable belts and gears, which it is not deemed necessary to particularly describe, the operation of my invention is as follows:

The lap is unrolled from the roller A and deposited upon the endless apron C, which carries it forward, and at the same time the cloth or netting is unrolled from the rolls B B', covering both the upper and lower side of the cotton. The cotton thus covered is now

carried to and through the sizing-rolls F F', which size the cloth or netting upon both sides of the cotton, the lower roller of each pair being partly immersed in a trough or box of size, and rotating therein, all in a manner well understood. The batting, with its sized covering, is now carried back and forth through the drying-chamber I, which is provided with a fan, J, and steam-pipes K, by the aid of the rolls L', G', and L², and delivered to the calendering or ironing rolls M M' M² M³, which, being heated, remove any dampness remaining in the goods, and give to the cloth or netting a proper finish. Before leaving the drying-chamber I the batting passes through rolls L, which compress the edges, so that it can be lapped without increasing the thickness. The goods are now finished, and may pass to and be taken upon the roller O, unless it is desired to measure them, when they pass under the roll L³, through the measuring-rolls N N', and under the roll N² to the receiving-roll O.

The measuring-rolls N N', Figs. 1 and 3, consist of a thirty-six-inch roll and a friction-roll, respectively, the latter of small diameter, to prevent the sheet from slipping over the roll N when it is disconnected from the receiving-roll O.

The roll N is provided upon its circumference with a block, P, to which coloring-matter is transferred from the box Q through the medium of a collar, R, upon the rotating shaft S, and marks the cloth at each rotation of the roll N, or one for every yard.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The endless apron C, for receiving and carrying the material, in combination with the sizing-rolls F F', the drying-chamber I, and the calendering or ironing rolls M M' M² M³, the whole constructed and operating together substantially as described, for the purposes specified.

2. The measuring device consisting of the roll N, with its block P, in combination with the collar and shaft R S and box Q, the whole constructed and operating substantially as described.

J. C. GRAY.

Witnesses:

JOSEPH T. RICH,

WALTER B. VINCENT.