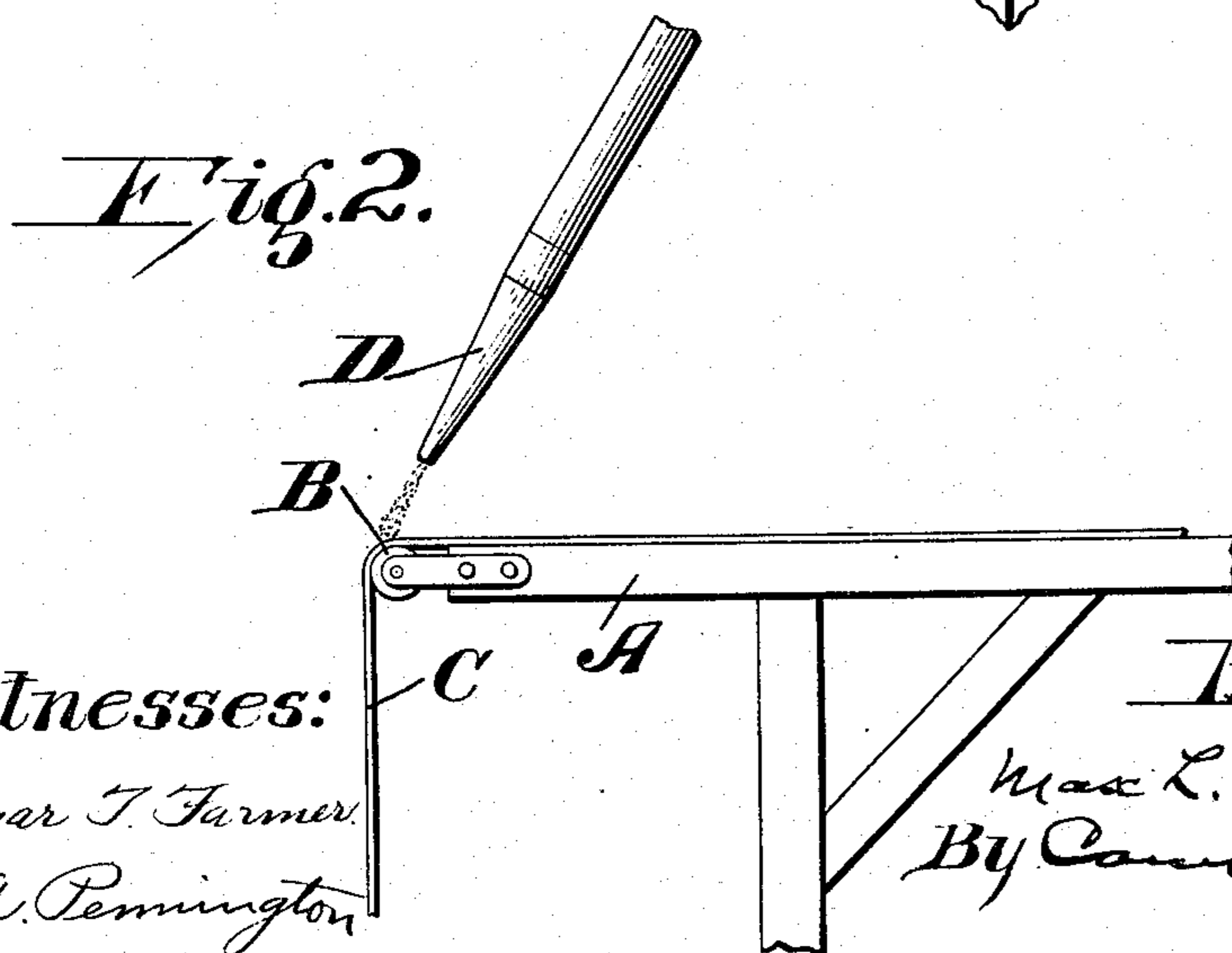
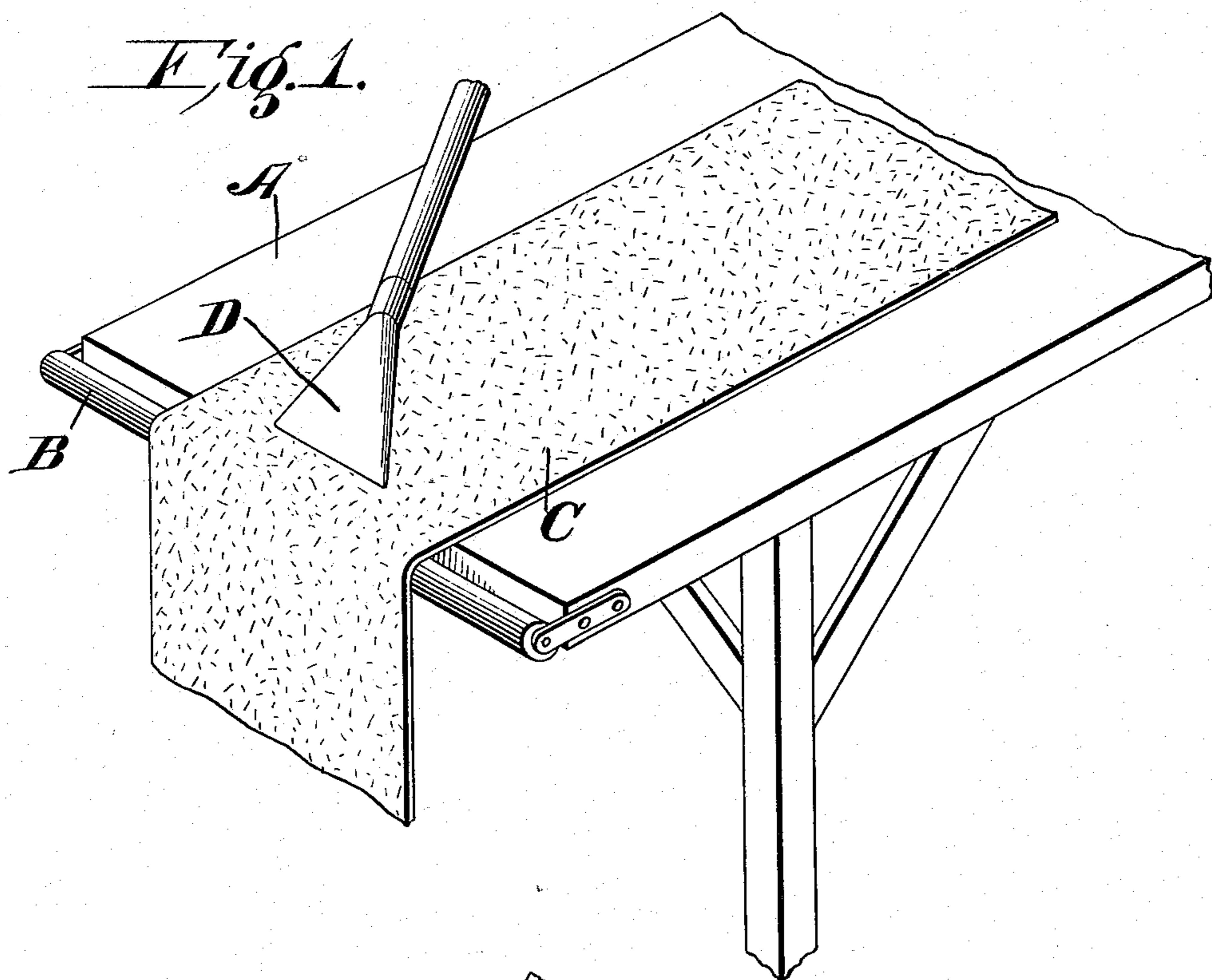


M. L. WEISS.
PROCESS OF RENOVATING APPAREL.
APPLICATION FILED FEB. 24, 1908.

930,522.

Patented Aug. 10, 1909.

2 SHEETS—SHEET 1.



Witnesses:

Edgar T. Farmer.
G. A. Remington.

Inventor:

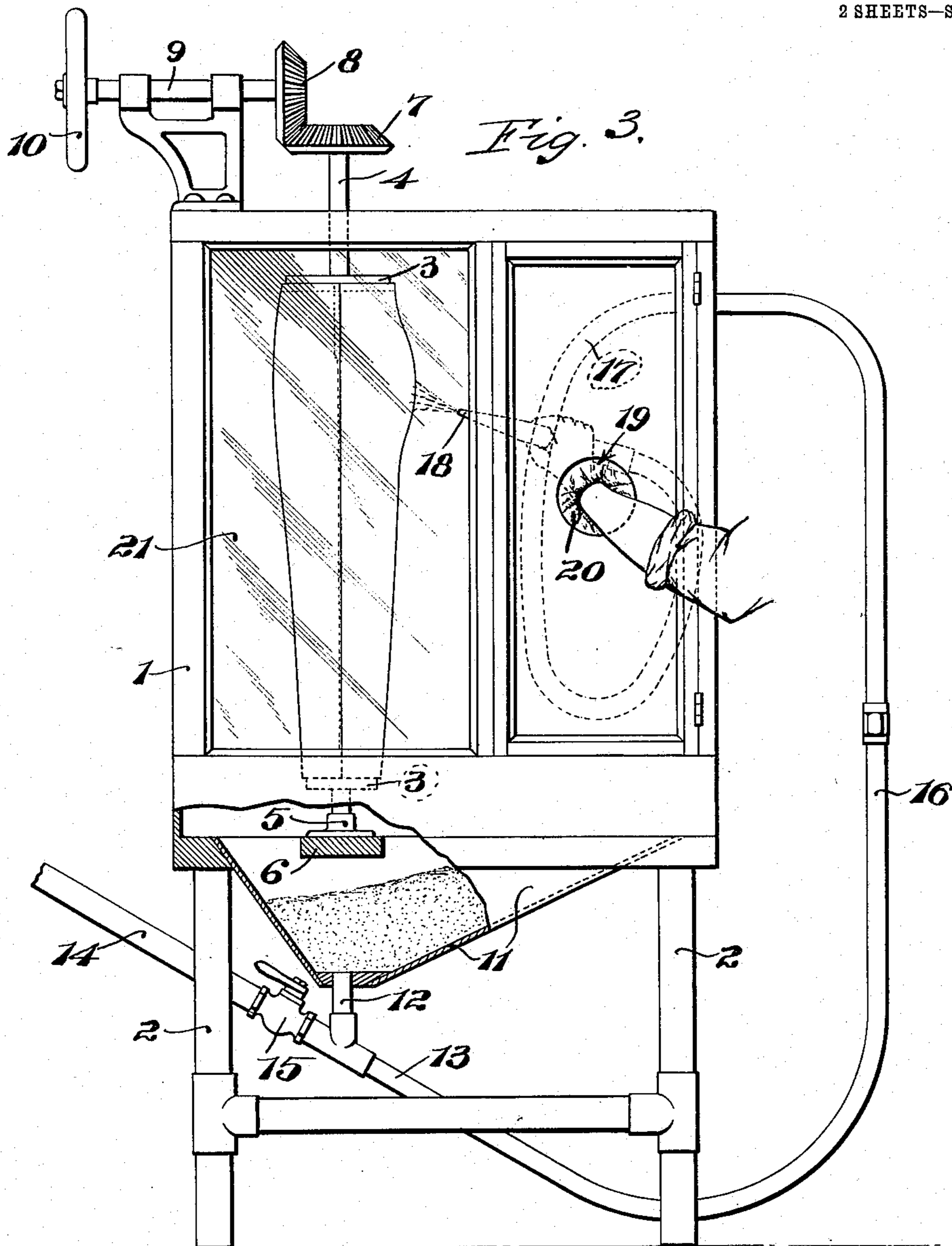
Max L. Weiss,
By *Cambridge*
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2 SHEETS—SHEET 2.



Witnesses:

Edgar T. Farmer,
G. A. Pennington

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UNITED STATES PATENT OFFICE.

MAX L. WEISS, OF ST. LOUIS, MISSOURI.

PROCESS OF RENOVATING APPAREL.

No. 930,522.

Specification of Letters Patent.

Patented Aug. 10, 1909.

Application filed February 24, 1908. Serial No. 417,586.

To all whom it may concern:

Be it known that I, MAX L. WEISS, a citizen of the United States, and a resident of the city of St. Louis and State of Missouri, have invented a new and useful Process of Renovating Apparel, of which the following is a specification.

My invention relates to a process of renovating apparel and has for its principal object to remove the shine and to restore the original appearance of the pattern of the fabric. The invention consists principally in sand blasting the goods as hereinafter described.

In the accompanying drawings forming part of this specification, and wherein like symbols refer to like parts wherever they occur, Figure 1 is a fragmentary perspective view of a simple form of apparatus for carrying my invention into effect; Fig. 2 is a fragmentary side elevation thereof; and, Fig. 3 is a view partly in front elevation and partly in section, showing a modified apparatus.

In carrying out my process, the sand blast is applied to all portions of the fabric that require renovation. Preferably, the device for applying the sand blast remains stationary, and the fabric is slowly drawn past it. Instead of delivering the blast at right angles to the surface of the fabric, it is preferable to incline the blast to the fabric, and to feed the fabric, first, in such direction that the blast will be against the nap and afterward to reverse the feed so that the blast will be in the direction of the nap. In order to render the blast more efficient, the fabric is bent or curled along the line of impact so as to open up the nap. This bending of the fabric can be conveniently effected by drawing it over a small rod or roller, in which case the sand blast is arranged to issue from a thin slit substantially parallel with the roller.

After the fabric has been submitted to the sand blast, the rubbish thereon, consisting of sand and small particles of dirt, is removed therefrom in any suitable way, as for instance, by beating or shaking or by air applied either as a blast or a suction.

If it is desired to further clean the fabric after the removal of the loose matter resulting from the sand blasting, the fabric may be submitted to any suitable cleaning operation, as for instance, the ordinary process of steaming or chemical cleaning.

For renovating fine fabrics by my process, a very fine sand should be used, such as is

commonly used by manufacturing jewelers. For renovating coarser fabrics, a coarser sand blast is preferable. It is obvious that any hard material suitably comminuted may be substituted for sand without affecting the operation of the process, and I intend the word sand blasting to cover the use of all such materials.

Referring now more particularly to Figs. 1 and 2 of the drawings, the apparatus comprises a work table A having a rounded rod or a roller B at one end over which the cloth or fabric C is bent or curled. Suspended above the table in fixed position and at an incline so as to discharge tangentially, or nearly so, with respect to the roller B is a sand blast nozzle D. By this arrangement, the blast is directed at an incline to the surface of the fabric at a point where it starts to bend or curl, whereby the action of the blast is upon the opened up nap. The cloth or fabric may be manipulated by hand peripherally and longitudinally of the roller B so as to bring the portions of the fabric it is desired to renovate into the path of the sand blast.

If desirable, the apparatus may be incased and the sand may be used over and over again in a manner similar to that set forth in connection with the modification which will now be described.

Referring now to Fig. 3 of the drawings, wherein is shown a modified apparatus for carrying my invention into effect, said apparatus comprises a closed housing or renovating chamber 1 which is mounted upon a suitable stand 2. Within the chamber 1 is rotatably mounted a form or frame 3. This form 3 may be made to correspond to the kind of garment to be renovated and interchangeably mounted on a rotatable spindle 4. This spindle is journaled at its lower end in a pedestal bearing 5 which is mounted on a cross piece 6 at the bottom of the chamber 1. The upper end of the spindle projects above the casing and has a bevel gear 7 on its end which meshes with a bevel gear 8 on a drive shaft 9. A hand wheel 10 is secured on the drive shaft, whereby the garment-carrying form may be readily rotated by the operator.

At the bottom of the chamber 1 is a hopper 11 for holding the supply of sand and also for catching the sand after it has blown against the garment. Projecting downwardly from the bottom of the hopper is a

short section of pipe 12 which communicates with a downwardly inclined pipe 13. The outer portion 14 of this pipe 13 leads from some suitable source of air pressure and it is provided with a controlling valve 15. The pipe 13 is extended upwardly as at 16 and is carried into the chamber 1 preferably near the top thereof. Inside of the chamber 1 the pipe is connected to a flexible pipe 17 which has a blast nozzle 18 thereon.

In the side of the casing is a circular opening 19 which is covered by a sleeve 20 of flexible material. The free end of the sleeve is preferably provided with an elastic puckering string. By this arrangement, the operator may insert his arm through the hole 19 into the casing so as to grasp and manipulate the blast nozzle. The elastic puckering string will draw the end of the sleeve close about the forearm of the operator so as to effectually close the opening and yet permit of the free movement of the operator's arm.

In order to permit the operator to see into the chamber, a transparent panel 21 is provided in the side of the casing.

In the operation of the apparatus herein shown, the valve 15 is opened to admit the air pressure into the pipe 13. The air flowing through the pipe will siphon the sand from the hopper and carry it with considerable force through the pipe connections to the nozzle 18 whereupon it may be directed at any desired point upon the garment or fabric to be renovated. By turning the hand wheel and manipulating the nozzle, the operator may direct the nozzle over the entire

garment or portions thereof at will. The sand after being blasted against the garment drops into the hopper where it may be used again.

While I have shown a form for a pair of trousers, obviously a form for a coat or any other garment may be readily substituted therefor. So, too, other forms of apparatus may be used for carrying my invention into effect.

What I claim is:

1. The process of renovating fabrics which consists in sand blasting the same.
2. The process of renovating fabrics which consists in directing a sand blast against the same in the direction of the nap thereof.
3. The process of renovating fabrics which consists in directing a sand blast against the same first against the direction of the nap and afterward in the direction of the nap.
4. The process of renovating fabrics which consists in sand blasting the same, and afterward removing the rubbish therefrom.
5. The process of renovating fabrics which consists in sand blasting the same, then removing the rubbish therefrom, and then chemically cleaning the same.
6. The process of renovating fabrics which consists in progressively bending the fabric and sand-blasting the same along the bend thereof.

Signed at St. Louis, Missouri, Feb. 21, 1908.

MAX L. WEISS.

Witnesses:

LOUIS GOLDSTEIN,
J. B. MEGOWN.