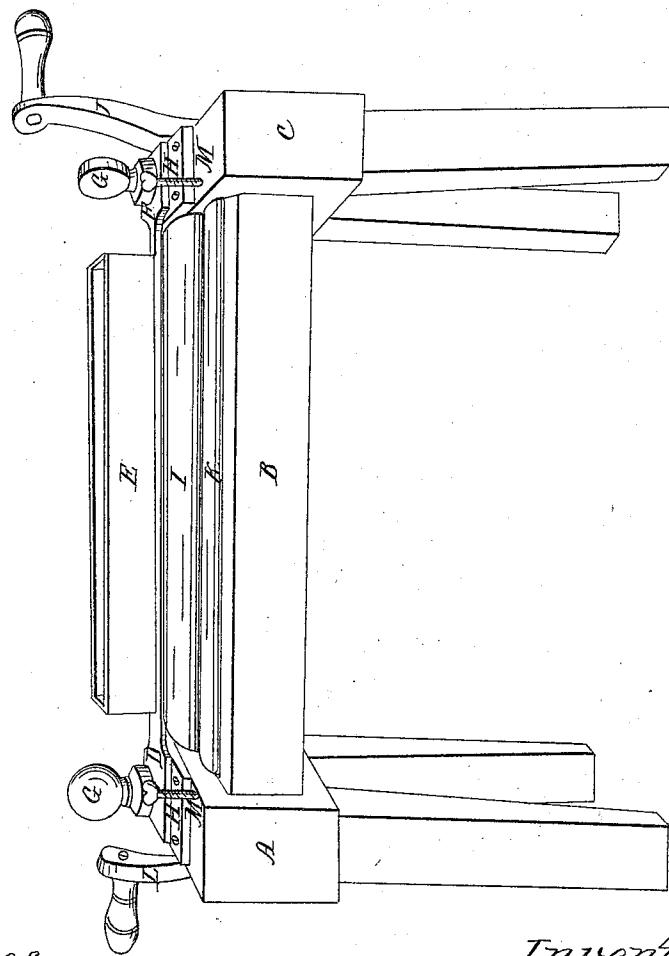


B. Morrison,
Making Medical Plasters,
No 341, Patented Aug. 8, 1837.



Witnesses

Edward Chapin

George Stratton

Inventor.

B. Morrison

UNITED STATES PATENT OFFICE.

B. MORISON, OF MILTON, PENNSYLVANIA.

MACHINE FOR SPREADING ADHESIVE OR OTHER PLASTER UPON MUSLIN, LINEN, OR OTHER KINDS OF CLOTH.

Specification of Letters Patent No. 341, dated August 8, 1837.

To all whom it may concern:

Be it known that I, B. MORISON, of Milton, in the county of Northumberland and State of Pennsylvania, have invented a new and useful Improvement in Machines for Spreading Adhesive or other Plasters Upon Muslin, Linen, or other Suitable Kinds of Cloth.

The nature of my invention consists in the application of a roller to a spreader, in such a manner, as that the cloth, on which the plaster is to be spread, may be kept at a proper distance from the spreader, and at the same time, be carried by means of the roller, along the bottom of the spreader containing the melted plaster, in such a manner as to cause the plaster to be regularly and smoothly spread upon only one side of the cloth, as it is moved along the bottom of the spreader upon the roller.

To enable others, skilled in the art, to make and use my invention, I will proceed to describe its construction and operation.

A frame is made, say about eighteen inches square from the inside, out of metal or solid wood, having four legs so as to stand about the height of a common table. In this frame, two rollers are placed parallel to each other, moving truly in eyes or holes, made in two opposite sides of the frame, by means of a gudgeon which projects from each end of each roller. On one end of each roller, a crank is attached to the gudgeon for the purpose of turning the rollers. The main roller is about five or six inches in diameter, and should be made of cast iron or brass, and turned perfectly true and smooth, and also so as to revolve perfectly true upon its gudgeons or axis. The smaller roller is about three inches in diameter, made of wood and turned so as to revolve perfectly true. The smaller roller is placed in the frame with its lower edge on a line with the lower edge of the larger roller, leaving between the two, a space of about an inch in width. The gudgeons of each roller are made to fill the eyes or holes in which they revolve, so that they may run easily and yet without any variation. On the top of the frame, at each end of the larger roller, a metallic plate is secured so that their upper surfaces are on a line with the upper side of the roller. In each plate a thumb screw works perpendicularly, hav-

ing a shoulder on each for the purpose of holding the spreader down firmly to its proper place directly over the top of the roller. The spreader is made of cast iron or brass, and in the form of a triangular trough, having an opening along the bottom of about an half inch width and about three or four inches shorter than the roller, and having projections at each end of the trough, through holes in which, the thumb screws pass in such a manner as that the spreader may be screwed down upon the larger roller. The two lower edges of the sides forming the trough, as also the bottom of each projection, are made smooth, and on a perfectly true line, so that when screwed down upon the plates, the larger roller may be touched thereby, along every part of the same, as the roller is turned upon its gudgeons. The width or thickness of the edges of the spreader, at the parts which touch the surface of the roller, is about the sixteenth of an inch, or less; but, immediately from the edges, the thickness of the sides continues to increase at an angle of about ninety degrees, until about half an inch thick, which is sufficient to make the spreader retain heat and at the same time give sufficient strength to prevent the sides from bending while spreading the plaster. The smaller roller is for the purpose of winding the cloth upon, previously to spreading the plaster thereon, and is capable of being made to run tightly or freely, by means of a cork at each end, which is pressed down, or raised from the gudgeons of the same, by means of a thumb-screw which works in the frame at each end of the roller—the corks are let into the frame from the inside, so that the shoulders of the roller prevent them from falling out.

In order to use the machine for the purpose intended, one end of the cloth is secured to the smaller roller (by means of tacks, or otherwise) and then wound tightly and smoothly thereon, (by turning toward the larger roller;) the other end of the cloth is then passed over the top of the larger roller and around the same to the bottom thereof, so that the cloth may embrace about three-fourths of the surface of the larger roller. The spreader is now made sufficiently warm to keep the plaster in a semi-liquid state, and then put to its place upon the larger roller. A small bit of paper is

now put under each end of the spreader so as to rest upon the plates, just the thickness that the plaster cloth is to be when finished, and the spreader screwed down firmly upon them. The plaster being melted to the consistency of common molasses, is now poured into the trough of the spreader—one person now takes hold of the loose end of the cloth, and drawing toward the smaller roller so as 10 to keep the cloth tight and smooth against the larger roller, walks backward, as a second person, by turning the larger roller, draws the cloth from the smaller, between the spreader and the larger roller, and thus 15 finishes. The smaller roller must be corked down sufficiently to keep the cloth stretched smooth, while the plaster is being spread thereon; and the cloth should be a little wider than the length of the opening 20 in the bottom of the spreader, so that a margin of the cloth may be left unspread, on each side, in order to prevent the plaster from sticking to the roller at each end.

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

The application of a roller to a spreader, as herein described, so that the muslin, linen or other cloth, on which adhesive or other plaster is to be spread, may be kept at such a distance from the spreader and at the same time be carried by means of the roller along the bottom of the spreader (while containing the melted plaster) as to cause the plaster to be uniformly and smoothly spread upon only one side of the cloth as it is moved along across the bottom of the spreader upon the roller, or between the roller and spreader, as herein described; using in the construction any kind of material that will be suitable to the purpose intended.

B. MORISON.

Witnesses:

Jos. BOUND,

JOHN F. WOLFINGER.