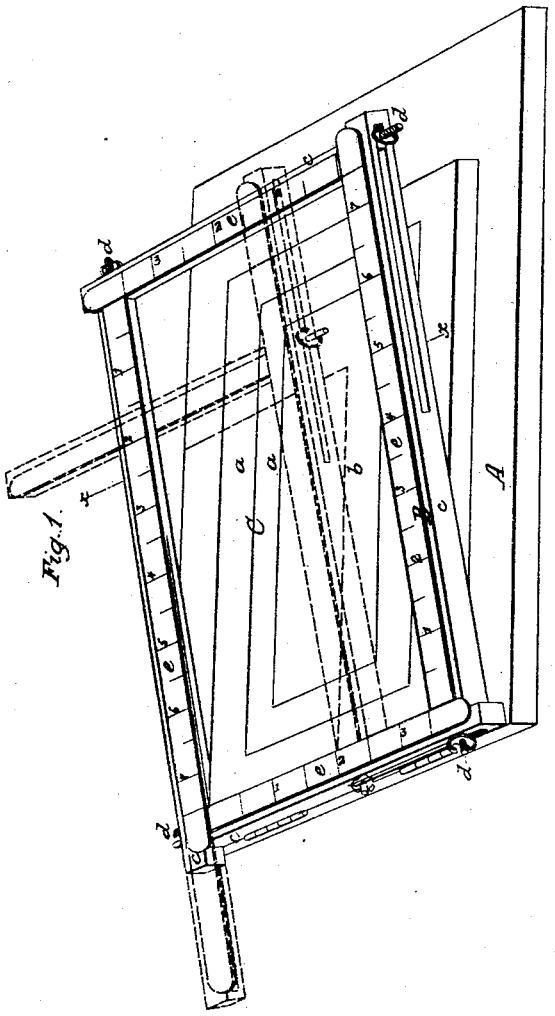
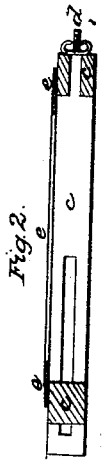
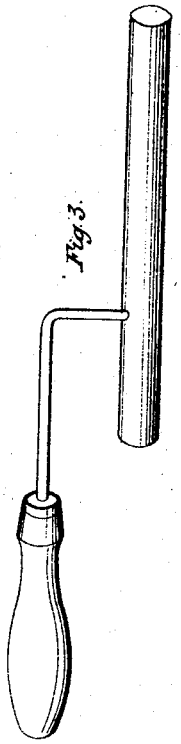
J. M. KEEP.

Plastering Implement.

No. 7,323. Patented April 30, 1850.







N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

J. M. KEEP, OF BATH, MAINE.

GAGE FOR SPREADING PLASTERS.

Specification of Letters Patent No. 7,323, dated April 30, 1850.

To all whom it may concern:

Be it known that I, JAMES M. KEEP, of Bath, in the county of Lincoln and State of Maine, have invented a new and useful Improvement in Apparatus for Spreading and Gaging Plasters for Pharmaceutical and other Purposes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, which forms part of this specification, and in which—

Figure 1 represents a view in perspective of my plaster gage. Fig. 2 is a section through the clamp frame at *x x* of Fig. 1, and Fig. 3 is a view of the spreading iron.

My apparatus consists of an adjustable table and clamp frame adapted thereto both of which are capable of expansion and contraction to graduate them to the size of the plaster required and so constructed and arranged that the leather or other material employed for the purpose is firmly held during the operation of overlaying it with the adhesive material by means of a heated iron; the material being evenly spread and leaving a border or selvage around the edge of the plaster.

In the drawing A is a flat slab forming the base of the apparatus to which the other portions are attached; these consist of an adjustable rectangular frame B, and of a table C, composed of a number of movable concentric rectangular frames *a*, of gradually increasing size inclosing a rectangular plate *b*, equal in size to that of the smallest plaster required. The adjustable rectangular frame is composed of four straight side pieces *c* one of which is hinged to the slab. Each side piece is slotted throughout a large portion of its length to receive a tenon formed on the solid extremity of the piece next adjoining it, the tenon is arranged to slide from one end of the slot to the other and is clamped in any required position by a nut and screw, *d*. It will now be perceived that by loosening these screw nuts the opposite sides of the frame may be placed at any required distance from each other within the limits formed by the lengths of the slots in which the tenons slide; thus forming an expandable frame which can be adjusted to receive within it a rectangular sheet of leather of any required size. The upper edge of each side piece is furnished with a strip of metal, *e*, projecting sufficiently within its inner edge to cover a portion of the leather, wide enough to form a proper selvage or margin for the plaster; these strips are graduated (as represented in the drawing) to enable the operator to set the adjustable side pieces with facility to the size of the plaster he wishes to spread. The strips also determine the thickness to which the material is spread as the iron (Fig. 3,) is slid over them and removes any surplus.

The movable frames (*a*) with their central plate form the bed on which the leather is supported while the material is spread upon it; the central plate is retained in its proper position on the slab A by steady pins projected from its underside which enter holes made in the slab; the latter is pierced with numerous pin holes in order that as the frames are removed to adjust their upper face to the size of the intended plaster, the remaining ones with the central plate may be moved on the slab A to adapt them to the position of the expandable frame.

In order to exemplify the manner of using this apparatus I will describe the process of making a plaster; begin by cutting out the leather to the required size, turn up the adjustable frame on its hinges and set it to the size of the leather by the divisions on the metal strips; make the bed on which the plaster is to be spread the proper size by the removal or addition of frames as the case may require, and shift the bed thus formed toward the left hand corner of the slab (as represented in red lines in the drawing); place the leather upon the bed and shut down the frame, the metal strips of which pressing upon the leather hold it firmly; then put the material (which if not sufficienty plastic must be heated) upon the leather, and spread it with the iron (Fig. 3), which must be heated when necessary, taking care to keep its extremities over the metal strips, which by preventing the iron from coming closer to the leather than their thickness, gage the thickness of the coating of the material upon the leather, any surplus being wiped off by the iron. Separate the plaster from the edges of the metal strips by a blunt pointed awl or needle; the

frame is then raised and the finished plaster removed.

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

The combination of the adjustable expanding and contracting frame with the adjustable expanding and contracting bed, the several portions of the combination being arranged and constructed substantially as herein set forth.

In testimony whereof I have hereto subscribed my name this 16th Feb., 1850.

JAMES M. KEEP.

Witnesses:

E. S. REMRICK,

F. H. WATSON.