No. 692,647. Patented Feb. 4, 1902.

S. FIELD.

WALL PAPER PASTER AND TRIMMER.

(Application filed May 13, 1901.)

No Model.)

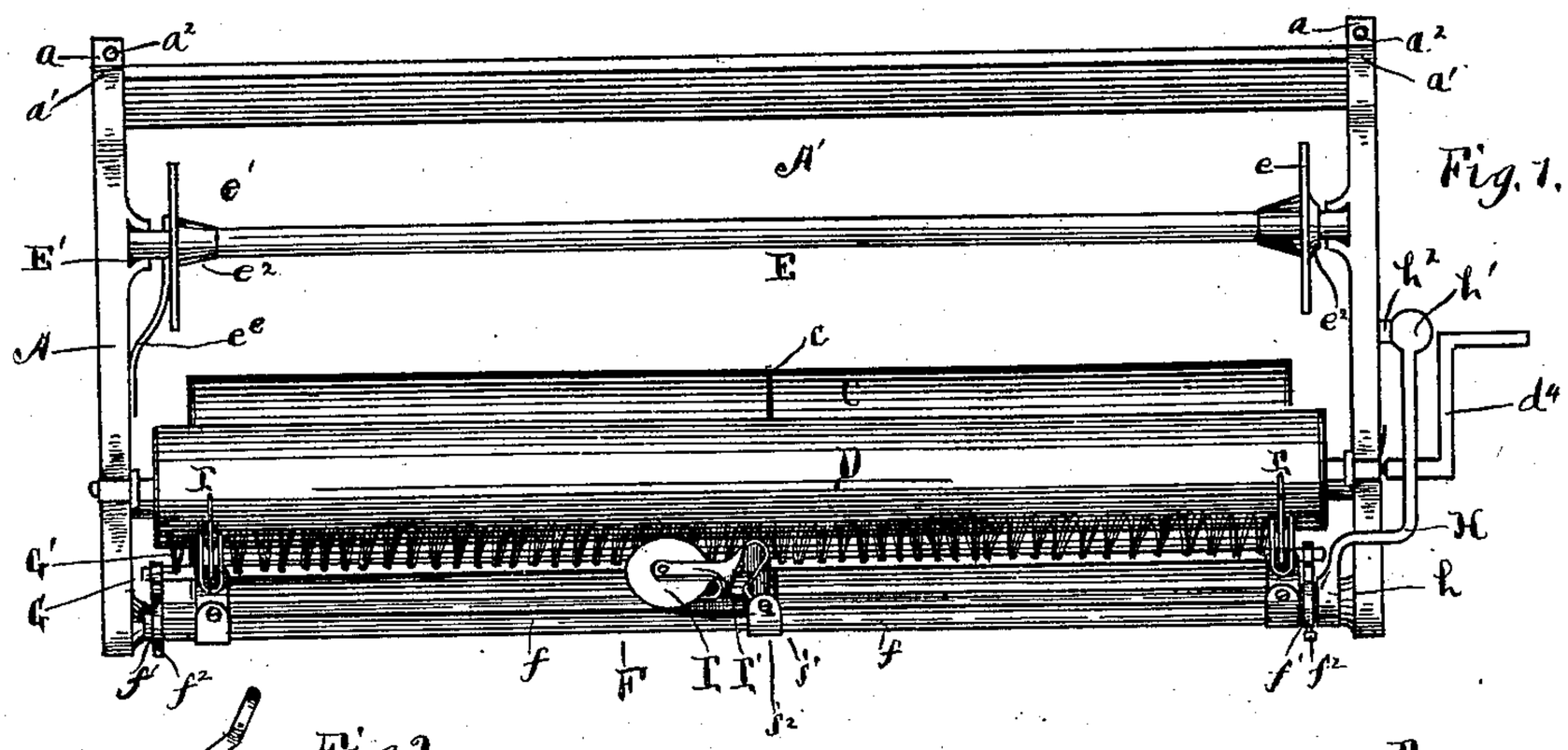

Fig. 1.

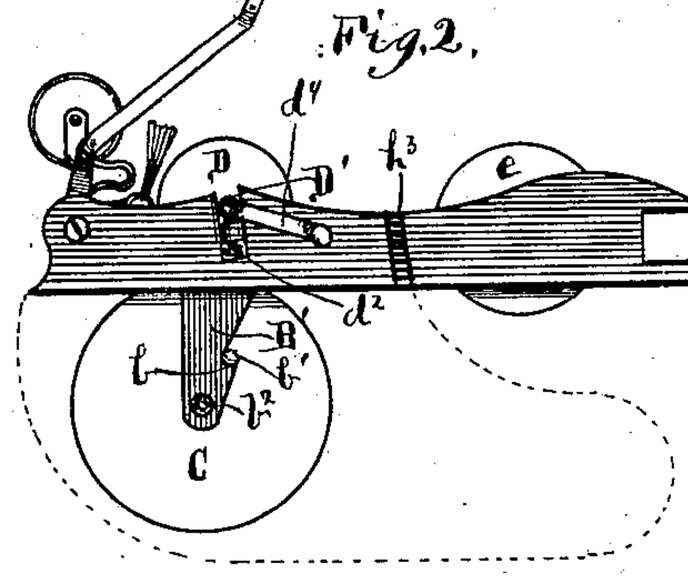

Fig. 2.

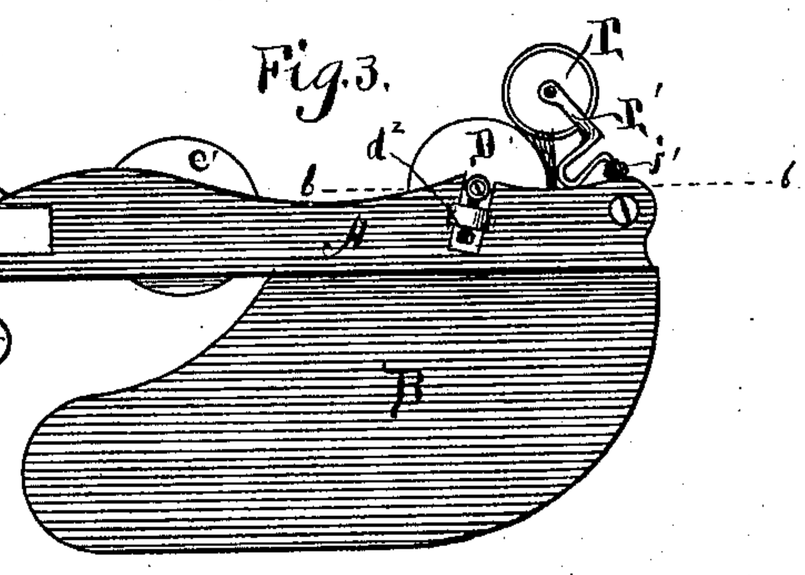

Fig. 3.

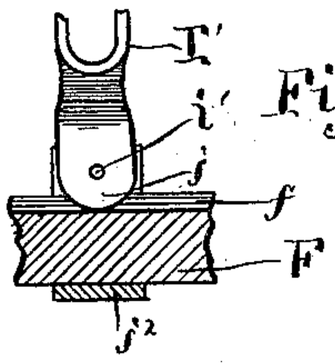

Fig. 5.

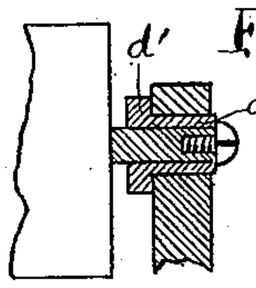

Fig 6.

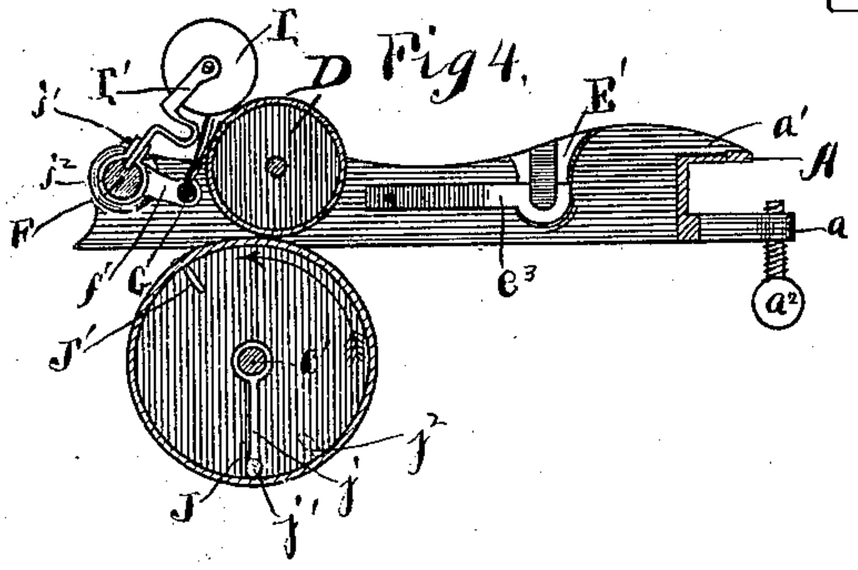

Fig 4.

Witnesses.
Samuel W. Banning
Thomas B. McGregor.

Inventor
Sjonne Field.
By Banning & Banning.
Atty's.

UNITED STATES PATENT OFFICE.

SJONNE FIELD, OF CHICAGO, ILLINOIS.

WALL-PAPER PASTER AND TRIMMER.

SPECIFICATION forming part of Letters Patent No. 692,647, dated February 4, 1902.

Application filed May 13, 1901. Serial No. 60,027. (No model.)

To all whom it may concern:

Be it known that I, SJONNE FIELD, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Wall-Paper Pasters and Trimmers, of which the following is a specification.

It is well known that the ordinary method of preparing wall-paper for the wall is to lay it face down on a board or table and apply paste to the back by means of a hand-brush and to trim the edges with a knife and a yard-stick. This method is slow, tedious, and unsatisfactory in that it is very difficult to apply the paste uniformly over the back of the paper and to trim the same smoothly and evenly, so that when applied to the wall the edges will fit perfectly together. My invention is intended to overcome these difficulties and to automatically and simultaneously paste and cut the paper smoothly and evenly; and it consists in the features of construction and combination of parts hereinafter described and claimed.

In the drawings, Figure 1 is plan view of the improved paster and cutter, showing the tank removed; Fig. 2, an end elevation of Fig. 1, showing the mechanism for operating the paster and cutter; Fig. 3, an end elevation of the opposite end, showing the tank fitted into place; Fig. 4, a sectional elevation of Fig. 1; Fig. 5, a detail view of one of the forked supports of the cutter-wheel, showing the method of attaching it to the carrying-rod; and Fig. 6, a detail sectional view taken on line 6 of Fig. 3, showing one of the bearings in which the roller is journaled.

The parts composing my invention are suitably mounted upon a framework or support consisting of two end rails or pieces A, each rail or piece having a lower jaw a and an upper jaw a', with a space between. The end rails or pieces are held together by a connecting-bar A', and the lower jaw of each end rail or piece has a set-screw a^2 for the purpose of securing the apparatus firmly to the edge of a table or other suitable support. Attached to each end rail or piece of the frame is a hanger B', extending downward and provided on one side with a notch or recess b, adapted to receive and engage with a pin or projection b', (shown in dotted lines in Fig. 2,) extending inwardly from the end wall of the receptacle or tank B for the glue or paste. This arrangement enables the tank to be easily and quickly removed. Between these downwardly-projecting hangers and extending into the body of the tank is rotatably mounted a cylinder C, journaled at the points b^2 on each of the hangers. Above the tank and in contact with the cylinder C is mounted a roller D, having its journals entered into a recess D' in the end rails or pieces of the frame. As shown in Fig. 6, each journal of the roller D is surrounded by a box or sleeve d, having a flange or rim d' on the inner end. An adjusting-screw d^2 in each end rail or piece is provided to have its end contact with the box or sleeve and furnish the means by which the entire roller may be raised or lowered within the recesses D' of the end rails or pieces of the frame. The journal at one end of the roller is extended and has attached thereto a handle d^4, by which the roller may be turned; but other means than the handle may be employed for transmitting motion to the roller and to the cylinder. Around the cylinder C is a band c, of rubber or other suitable material, with which the roller D after it has been properly adjusted by the screws d^2 will engage and cause the roller as it is revolved to impart rotation to the cylinder. A rod E for carrying a roll of paper is suitably mounted in slots E' in the inner face-walls of the end pieces of the frame. This paper-carrying rod is provided with a fixedly-mounted circular end disk e and a slidably-mounted end disk e', against which presses a spring e^3. The object of this spring is to keep the slidably-mounted end disk in a continuous contact with the end of the roll of paper. Both of the disks are provided with hubs e^2 for the purpose of holding them securely on the paper-carrying rod. By removing the disk e' from the rod the roll of paper may be easily inserted thereon. In order to prevent the hub of the disk e' from interfering with the recessed spring e^3, it is advisable to turn this disk so that the hub will extend inwardly. A carrying-rod F is mounted to rock between the end rails or pieces of the frame and is provided with inwardly-projecting adjustable supports f' for the purpose of carrying a

brush-rod G, into which are inserted a series of bristles G′ for the purpose of forming a brush to engage with the cylinder D when the cylinder is rotated. The supports f' are provided with set-screws f^2 for regulating the angle of inclination of the brush-rod G in relation to the carrying-rod F. The carrying-rod F is provided with a longitudinally-extending groove or recess f, the purpose of which will be hereinafter explained.

A lever H is fixedly attached by means of the head h to the end of the carrying-rod. This lever H is provided with a finger or thumb piece h', adapted to engage with a ratchet h^2 for the purpose of holding the lever firmly in place when it has been brought down. On the carrying-rod F are mounted cutting-wheels I, carried by forked arms or supports I′, the bodies of which are bent to form springs. As shown in Fig. 5, the Y-shaped support, at its base end, is made semicircular in shape and is arranged for this end to enter a longitudinally-extending groove or slot f in the carrying-rod F, so that it may oscillate freely about the pivot i' in the clasp or collar i^2 in order to turn down one of the series of cutting-wheels, as shown in Fig. 1. Since the brush-rod on which the brush is mounted and the carrying-rod on which the cutting-wheels are mounted are both operated simultaneously by the lever H, the two rods may be so adjusted by means of the set-screws f^2 that the brush G′ will contact with the roller D at the same time that the cutting-wheels contact therewith. The cutting-wheels may be regulated at any desirable distance from one to the other by sliding them backward or forward on the carrying-rod, and the brush and cutting-wheels may be brought lightly or firmly into contact with the roller by changing the position of the lever for its engagement with the ratchet. Within the cylinder C and loosely mounted upon the axle C′ is a tongue j, provided with a head j', which as the cylinder revolves in the direction of the arrow, Fig. 4, will be carried up by the riser or shelf J, which extends longitudinally within the interior of the cylinder, and when the head and tongue have been carried to the highest point in the cylinder by the riser or shelf J they will fall by gravity and strike the riser or shelf J′, which at that time will have been carried to the position j^2, as indicated in dotted lines in Fig. 4. This action will produce a sharp strike or click upon each revolution of the cylinder, in which way the number of feet or yards of paper pasted and trimmed can be easily determined, since a certain length of paper will have been treated at each revolution.

The operation of the machine embodying the invention is as follows: The paper is mounted on the rod E and is passed between the cylinder and the roller so that its wrong side will be presented to the brush. By turning the handle the roller will be rotated and will impart motion to the cylinder. The revolving of the latter will apply the paste on the wrong side of the paper as it passes between the roller and the cylinder, and when the lever has been pressed down sufficiently far the brush and the cutting-wheels will be brought into contact with the paper simultaneously, distributing the paste over the surface of the paper and trimming the edges thereof. If the paper is stiff or thick, it will be necessary to press down the lever farther on the ratchet than if the paper is light or thin, thus producing a greater pressure of the cutting-wheels on the paper. It will be seen by this arrangement that the paper can be easily, readily, and smoothly trimmed and pasted by one operation, that the machine is simple and easily operated, that it may be readily attached to or detached from a table, that no extensive area is necessary upon which to spread out the paper, and that the result is more satisfactory than if the entire operation had been done by hand.

What I regard as new, and desire to secure by Letters Patent, is—

1. In a wall-paper paster and trimmer, the combination of a frame, a receptacle for paste detachably suspended therefrom, a cylinder rotatably mounted on the frame within the paste-receptacle, a roller rotatably mounted and contacting with the cylinder, and a brush adjustably mounted to engage with or be withdrawn from the roller, substantially as described.

2. In a wall-paper paster and trimmer, the combination of a frame adapted to be fastened to the edge of a table and provided with hangers, a receptacle for paste detachably suspended from the hangers, a cylinder rotatably mounted between the hangers and operating within the paste-receptacle, a roller rotatably mounted on the frame and contacting with the cylinder, a brush held in an adjustable rod, and means for bringing the brush into and out of engagement with the roller, substantially as described.

3. In a wall-paper paster and trimmer, the combination of a frame adapted to be fastened to the edge of a table and provided with hangers, a receptacle for paste detachably suspended from the hangers, a cylinder rotatably mounted between the hangers and operating within the paste-receptacle, a roller rotatably mounted on the frame and contacting with the cylinder, cutting-wheels rotatably mounted upon a carrying-rod, brushes held in a rod adjustably connected with the carrying-rod, and means for bringing the brush and wheels simultaneously into and out of engagement with the roller, substantially as described.

4. In a wall-paper paster and trimmer, the combination of a frame adapted to be fastened to the edge of a support, a rod for carrying a roll of paper rotatably mounted in the frame, a receptacle for paste suspended from the frame, a cylinder operating within the paste-receptacle, a roller rotatably and adjust-

ably mounted in the frame, a brush on a brush-rod, cutting-wheels on a carrying-rod, and means for bringing the brush and cutting-wheels simultaneously into contact with the roller, substantially as described.

5. In a wall-paper paster and trimmer, the combination of a frame provided with jaws and set-screws acting thereon, hangers attached to the frame and provided with recesses or notches, a receptacle for paste provided with a stud at each end adapted to enter a recess or notch of the hanger, a rod for carrying a roll of paper rotatably mounted in the frame, a cylinder extending into the body of the paste-receptacle and journaled in the hangers, a roller adjustably journaled on the frame and contacting with the cylinder, a rocking grooved carrying-rod having a brush-rod connected therewith, brushes on the brush-rod, cutting-wheels rotatably mounted in oscilliating spring-supports on the carrying-rod, a lever fixedly attached to the carrying-rod, and means for rotating the roller, substantially as described.

6. In a wall-paper paster and trimmer, the combination of a frame, a paper-carrying rod mounted therein, a receptacle for paste suspended therefrom, a roller mounted on the frame, means for distributing the paste evenly over the paper, and a cylinder rotatably mounted in the paste-receptacle and provided with risers or shelves on its inner face, and a tongue having a head fixedly attached thereto and mounted on the axle of the cylinder, substantially as described.

7. The combination with a rocking carrying-rod, of a cutting-wheel journaled in a forked support having its body bent forward and back to form a spring and having its base end rounded to oscillate in a groove of the carrying-rod, and a collar on the carrying-rod having the base end of the forked support pivoted thereto, substantially as described.

SJONNE FIELD.

Witnesses:
THOMAS B. MCGREGOR,
SAMUEL W. BANNING.