S.M. Baker.
Printing Blanket.

Nº 20407. Patented Tec 20.1859.

pig.1.

. :. . .

Rubber.

Fig. 2.

Fig.3.

Witnesses. Tough Gavett. Albert W. Brown. J. W. Waker

UNITED STATES PATENT OFFICE.

S. W. BAKER, OF PROVIDENCE, RHODE ISLAND.

BLANKET FOR PRINTING.

Specification of Letters Patent No. 26,467, dated December 20, 1859.

To all whom it may concern:

Be it known that I, SETH W. BAKER, of Providence, in the county of Providence and State of Rhode Island, have invented cer-5 tain new and useful Improvements in Blankets used for Printing Fabrics, and that the following description, taken in connection with the accompanying drawings, hereinafter referred to, forms a full and exact 10 specification of the same, wherein I have set forth the nature and principles of my said improvements, by which my invention may be distinguished from all others of a similar class, together with such parts as I claim 15 and desire to have secured to me by Letters Patent.

The figures of the accompanying plate of drawings represent my improvements.

Figure 1 is a top view of a portion of a 20 printing blanket. Figs. 2 and 3 are sections of the same, showing different forms of surface.

The endless blanket heretofore and now commonly used in machines for printing cal-25 icos and other fabrics, consists of a sheet or band of rubber having a smooth surface, and it is customary and necessary to use printing cloths called "grays" placed between the said rubber blanket or band and 30 the "white" or fabric to be printed, to prevent the coloring matter deposited upon the said blanket by the printing rollers which are wider than the piece to be printed—from flowing back upon and blurring the edges of 35 the "white." But the use of these "grays" is troublesome and expensive as they are employed but once for this purpose and are then bleached into "white" and afterward printed, thus requiring the keeping on hand 40 of a large stock of "grays" and printed goods. It is therefore very desirable to avoid the use of the "grays" and yet prevent the coloring matter from flowing back upon the edges of the print, and for this 45 reason it has often been attempted though previous to my invention unsuccessfully, to use an elastic blanket alone, without a "gray" interposed between it and the fabric to be printed, especially as the rubber blan-50 ket affords an elastic bearing surface to the print and one which is peculiarly susceptible to the action of the engraved printing rollers, thereby causing the fabric to receive every line, even the most delicate, from the 55 rollers, with great distinctness.

The present invention, by which I am en-

abled to use an elastic blanket and dispense with the use of "grays" between it and the fabric to be printed, consists in forming a new kind of india rubber or gutta percha 60 or other elastic blanket having either its edges or margins, or the whole of its surface sufficiently roughened to prevent the coloring matter received by it from the printing rollers from running or flowing 65 back upon the edges of the fabric being printed. This enables me also, as such a blanket can be made without seams or joints to avoid the bad effects produced by the seams of the "grays" heretofore necessarily 70 used, as herein above stated which consist of strips sewed together, the said seams causing an impression upon the print.

The compositions of which my improved blanket is made, can of course be very much 75 varied, but I have found good results, by using the following: I take 8 lbs. of rubber or gutta percha 4 lbs. of zinc, 3 lb. of sulfur and ½ lb. of magnesia and mix or grind them together and roll this composition into 80 a sheet in any of the modes well known by rubber manufacturers, and unite the ends so as to form an endless blanket. The sheet may then be cured or vulcanized in the usual manner. I then form roughened selvages 85 upon the blanket or roughen the whole surface of the same by any suitable means, such as by the use of emery wheels or in any other proper manner. The roughened surface may of course vary in its coarseness or 90 it may be formed by lining or by "scoring" it, but it should be of such a nature as to slightly absorb the coloring matter or sufficiently to prevent the colors from running or flowing upon the blanket.

It will be obvious that my new printing blanket may also be applied to the printing of wall and other papers.

Having thus described my improvements, I shall state my claim as follows:

What I claim as my invention and desire to have secured to me by Letters Patent is—

A rubber or gutta percha or other elastic printing band or blanket, having either roughened selvages or margins or the whole 105 of its surface roughened substantially as set forth.

S. W. BAKER.

Witnesses: JOSEPH GAVETT, ALBERT W. BROWN.