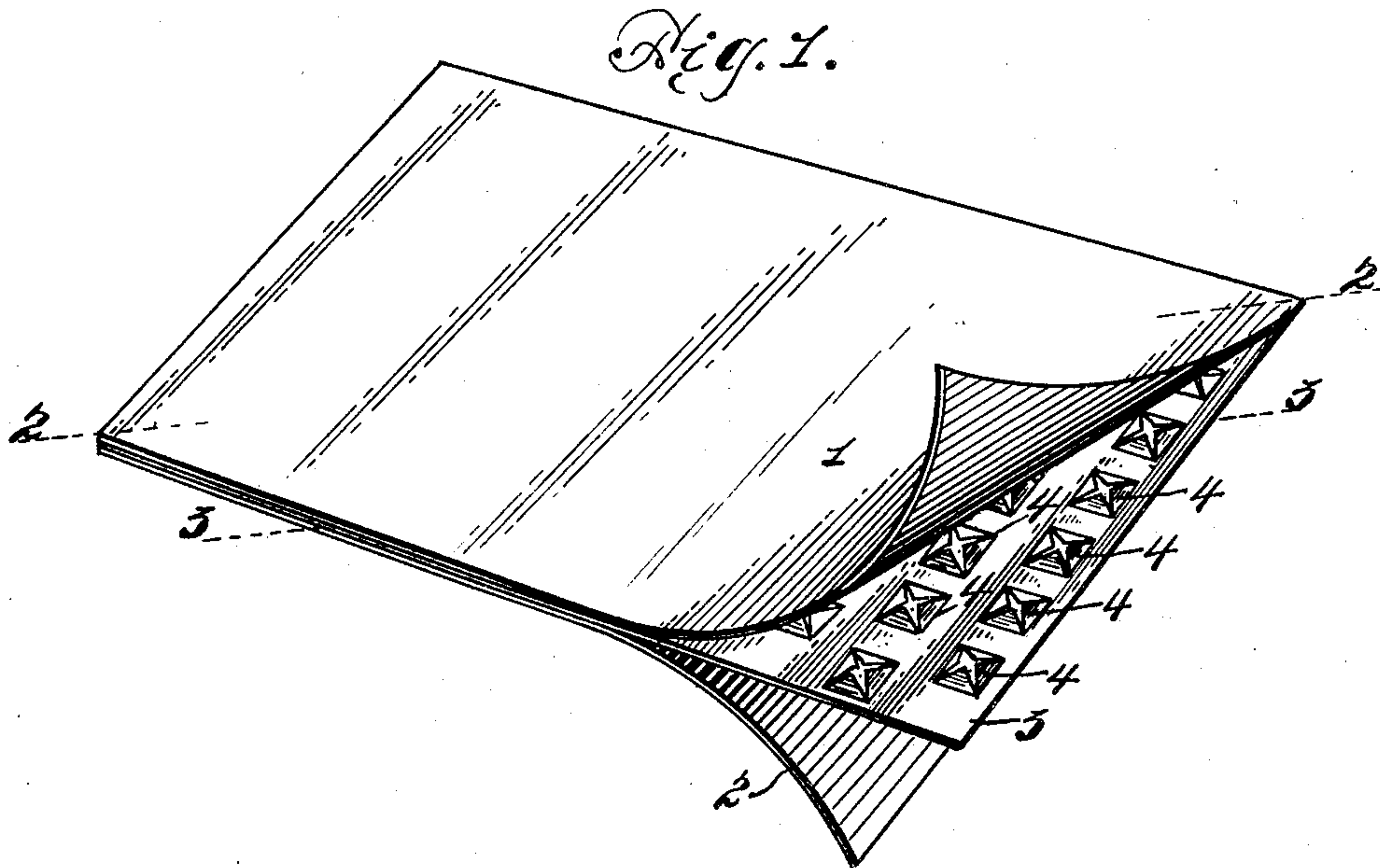


No. 878,089.

PATENTED FEB. 4, 1908.

K. E. ROGERS.
PRESS BOARD.

APPLICATION FILED JUNE 17, 1907.



Witnesses:
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UNITED STATES PATENT OFFICE.

KNIGHT E. ROGERS, OF SOUTH MANCHESTER, CONNECTICUT.

PRESS-BOARD.

No. 878,089.

Specification of Letters Patent.

Patented Feb. 4, 1908.

Application filed June 17, 1907. Serial No. 379,319.

To all whom it may concern:

Be it known that I, KNIGHT E. ROGERS, a citizen of the United States, residing in South Manchester, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Press-Boards, of which the following is a specification, reference being had to the accompanying drawings, in which—

10 Figure 1 represents a perspective view of my improved press board showing in a corner thereof the parts turned back and exposed to show its construction. Fig. 2 is an enlarged sectional view of my improved press
15 board taken on the line 2—2 of Fig. 1. Fig. 3 is a sectional view of my improved press board taken on the line 3—3 of Fig. 1.

Similar letters and figures refer to similar parts throughout the several views.

20 Press boards are used in knitting and hosiery mills for finishing the goods. The garments are laid between the sheets of press board in the form of what is known as a "book" until such book is of the right size to
25 be inserted between the plates of the hot steam press. These plates are hollow, and are customarily connected with a suitable source of steam. This book is then placed in the press proper along with the intervening
30 hot steam plates and the pressure and steam are simultaneously applied, thereby ironing, pressing and finishing the knitted fabrics of the mills ready for shipment to the trade. Such press boards are commonly made in
35 heavy sheets of paper card board averaging generally 1/32 of an inch in thickness, combining in such paper press boards great toughness, exceptional stiffness and a smooth glaze finish. They are composed of an all cotton
40 or linen rag stock containing the highest grade of cotton or linen fiber and in its manufacture the stock is so manipulated in the paper making machines as to leave the fibers of the raw stock with as much of their original
45 strength as is possible.

It has been found by experience that by the use of hot plates in the steam press the ordinary press boards soon become brittle and burn owing to the high degree of heat
50 employed, thereby rendering such sheets of press board practically useless for further work.

The object of my invention, among other things, is to secure the manufacture of a press
55 board to be used in the steam or hot press which will successfully avoid the likelihood

of burning, with its resultant brittleness, and lack of durability combining in itself all the well known features of the highest grade of press board, including a high glaze finish, so
60 that my improved boards may not take the imprints of the knitted goods. I attain this object by the use of a thin sheet of metal interposed between two sheets of ordinary press paper and so enmeshing and interlock-
65 ing the metal with the paper as to secure their cohesion together in the formation of a press board of no greater thickness than is ordinarily employed now, but combining
70 in itself extraordinary strength and durability and precluded from any possibility of soon burning or becoming brittle.

Referring to Fig. 1, 1 represents a thin sheet of ordinary press paper which forms the top covering of the metal reinforcing
75 filler 3. 2 is the lower sheet of press paper. 3 is the layer of sheet metal interposed as a filler or reinforcing strip to my press board, having teeth or projections 4 appearing
80 above the plain surface as shown in Fig. 2 and adapted, when the press paper is put through the finishing machines to be clenched or enmeshed in the paper sheets 1 and 2.

Fig. 2 shows, in cross section, my press board before the same has been put through
85 the finishing machine so as to unite together the component parts of my improved press boards. The form of the teeth projections is immaterial; a preferred form is shown in Fig. 1.
90

In Fig. 3 is represented in cross section on an enlarged scale my improved press board after the component parts are assembled as is shown in Fig. 2 and the board has passed
95 through the finishing machines. These finishing machines are of the well known type used by paper manufacturers and serve not only to press into a homogeneous mass the paper coverings and interior sheet metal filler, but also to impart to the surface of the
100 board the requisite glaze finish. Besides the teeth 4; 4, 4, are bent over and clenched into the paper coverings forming anchorages for the adhesion of such paper coverings to the
105 sheet metal proper. It will be observed that where the teeth 4, 4, of the sheet metal filler are constructed in the form shown in Fig. 1, the teeth grip into the sheet 1, while parts of the sheet 2 are forced into intimate union
110 with the sheet metal through the depressions formed in its surface as shown in Fig. 1. I have found in practicing my invention that

such sheet metal, preferably sheet steel, can be obtained in the market having a thickness of from 5/1000 to 10/1000 of an inch, and I prefer to use metal of such a degree of thin-
5 ness.

I do not wish to limit my invention to the use of teeth in the sheet metal filler inasmuch as the same beneficial result can be obtained by the use of any adhesive which
10 would act as a binder between the sheet metal and the two paper sheets forming the covering of my press board, but I prefer to use sheet metal having the projections or teeth as aforesaid inasmuch as a much more
15 permanent union is effected by their use between the paper coverings and the interior sheet metal of my board.

Having now described my invention, what I claim as new and desire to secure by Letters Patent of the United States is the following, viz:—
20

1. A press board consisting of an interior

filler of perforated sheet metal having projections therein, an upper paper covering and a lower paper covering, said paper coverings
25 being each secured to said metallic filler by the bent over projections of the filler being enmeshed in said paper coverings, substantially as described.

2. A press board consisting of an interior
30 filler of perforated sheet metal having projections on one surface and corresponding depressions on the other surface, paper coverings for such metallic filler, one of said paper coverings being secured to the metallic
35 filler by said projections being bent over and enmeshed within said covering, and the other covering being secured to said filler by being enmeshed in said depressions, substantially as described.

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