

No. 629,183.

Patented July 18, 1899.

A. S. ALLEN.
TYMPAN FOR PRINTING PRESSES.

(Application filed Mar. 3, 1899.)

(No Model.)

Fig. 1.

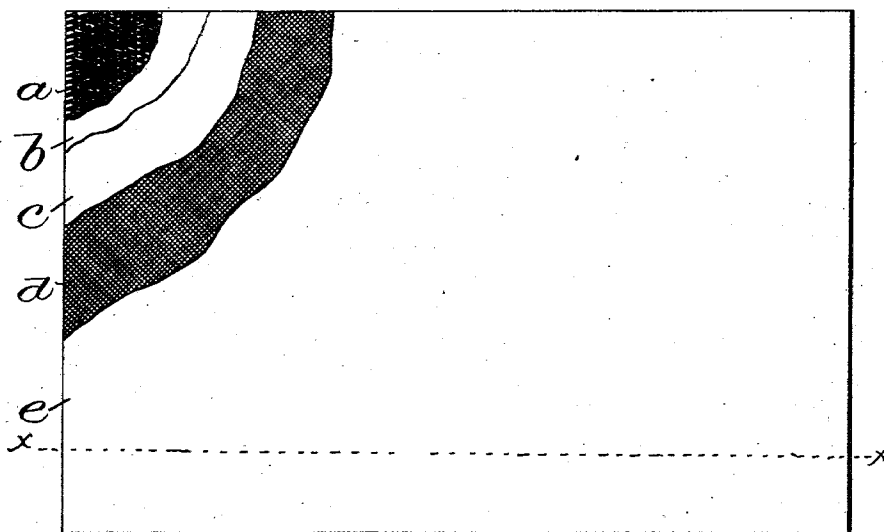


Fig. 2.

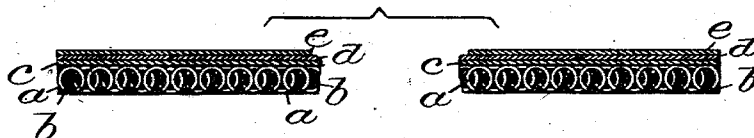
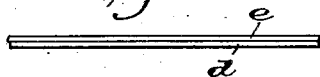


Fig. 3.



Witnesses:

Fried. L. Grunhof.
Edward H. Allen

Invention
Arthur S. Allen,
by Crosby & Gregory,
attys.

UNITED STATES PATENT OFFICE.

ARTHUR SAMUEL ALLEN, OF BOSTON, MASSACHUSETTS.

TYMPAN FOR PRINTING-PRESSES.

SPECIFICATION forming part of Letters Patent No. 629,183, dated July 18, 1899.

Application filed March 3, 1899. Serial No. 707,605. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR SAMUEL ALLEN, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Tympan for Printing-Presses, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to provide an improved tympan-surface for use in printing-presses of the rotary or other usual type.

United States Patent No. 613,219, dated October 25, 1898, shows a support or bed composed of wire and a bracing, and said patent describes that a leveling-sheet may be laid on said bed. In the use of said bed I find that great advantage arises by the employment on said leveling-sheet of a facing of india-rubber, and said facing by being scored finely to leave a series of short projections adds very materially to its utility.

One point of my invention, therefore, consists in a tympan for use in printing-presses, it presenting a hard leveling-sheet having applied to its face a layer of india-rubber or equivalent elastic material.

Other features of my invention will be hereinafter pointed out in the claims at the end of this specification.

Figure 1 in plan view shows a support or bed of the kind represented in said patent with my improvements added, various layers of material, to be hereinafter described, being broken out to enable the construction of the apparatus to be understood. Fig. 2 is a section of Fig. 1 in the dotted line *x*, the figure being broken out centrally. Fig. 3 shows the leveling-sheet and india-rubber layer detached from the bed or support containing the yielding wire.

The wire *a*, herein represented is in the form of coils and laid side by side and interlocked, the bracing *b* applied to said wire and entering the interstices left between separate turns or bends thereof, and the leveling-sheet *c* is and may be substantially such as shown in said patent; but this invention is not limited to the exact construction shown for the wire and bracing constituting the support or bed, and

instead I may employ wire bent in any other usual manner for employment in a bed or tympan for printing-presses.

The leveling-sheet *c* is supposed to be and preferably will be of fiber-board, celluloid, or any equivalent substance, it being a hard and strong material which, laid on the support described, may yield somewhat to the necessities of the type or printing surface.

By the use of my invention I do away substantially with the step of making ready, and in the use of the support and leveling-sheet I find when printing from cuts that I gain superior results by the addition to the leveling-sheet of a thin layer of india-rubber, as *d*, and I also find that it is of material advantage to score the face of the said layer of india-rubber, as shown in Fig. 1.

I may and preferably shall apply to the india-rubber a face-sheet *e*, of paper or other usual material employed for the face of the tympan.

Referring to Fig. 1, it shows the paper or active face partially broken out to disclose the layer of scored india-rubber below it, and the scored india-rubber is broken away to represent the leveling-sheet which sustains it and with which it is preferably connected, and said leveling-sheet is in turn broken away to show the support or bed below it composed of the bracing and wire, and part of the bracing is removed to disclose the wire.

By the term "india-rubber" I mean to cover not only india-rubber, but any other equivalent elastic material.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a tympan for use in printing-presses, a hard flat leveling-sheet having applied to its face a layer of india-rubber or equivalent elastic material, substantially as described.

2. In a tympan for use in printing-presses, a hard leveling-sheet having applied to its face a layer of india-rubber or equivalent elastic material, said india-rubber or equivalent elastic material being scored to present a series of projections, substantially as described.

3. A support or bed composed of wire, com-

bined with a leveling-sheet and a superimposed layer of india-rubber, substantially as described.

- 5 4. A support or bed composed of wire, and a bracing applied to said wire to retain it in position, combined with a leveling-sheet and a superimposed sheet of india-rubber, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ARTHUR SAMUEL ALLEN.

Witnesses:

GEO. W. GREGORY,
MARGARET A. DUNN.