(No Model.)

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MOUNTED DRAFTING SHEET.

No. 551,003. Patented Dec. 10, 1895.

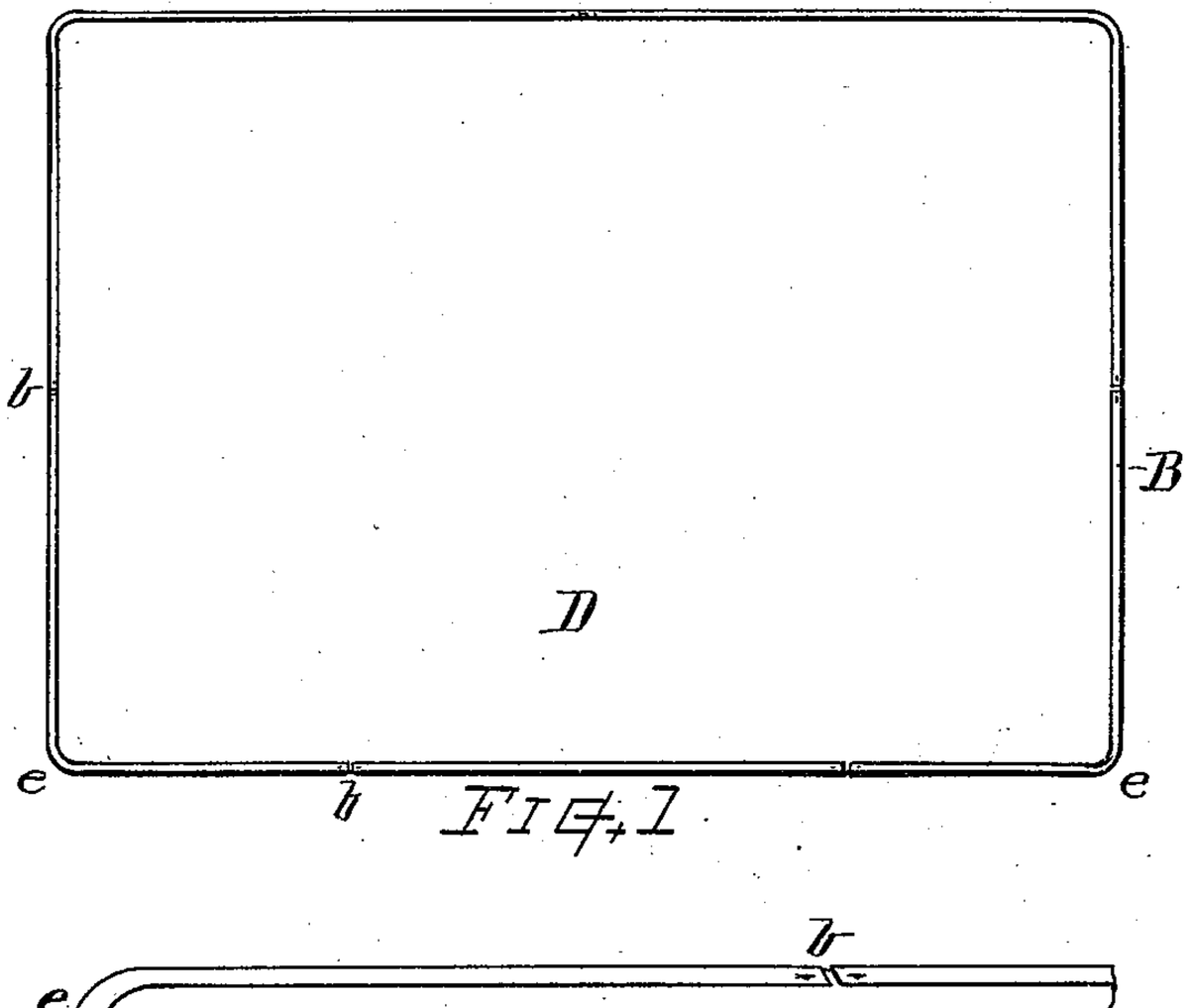

FIG. 1

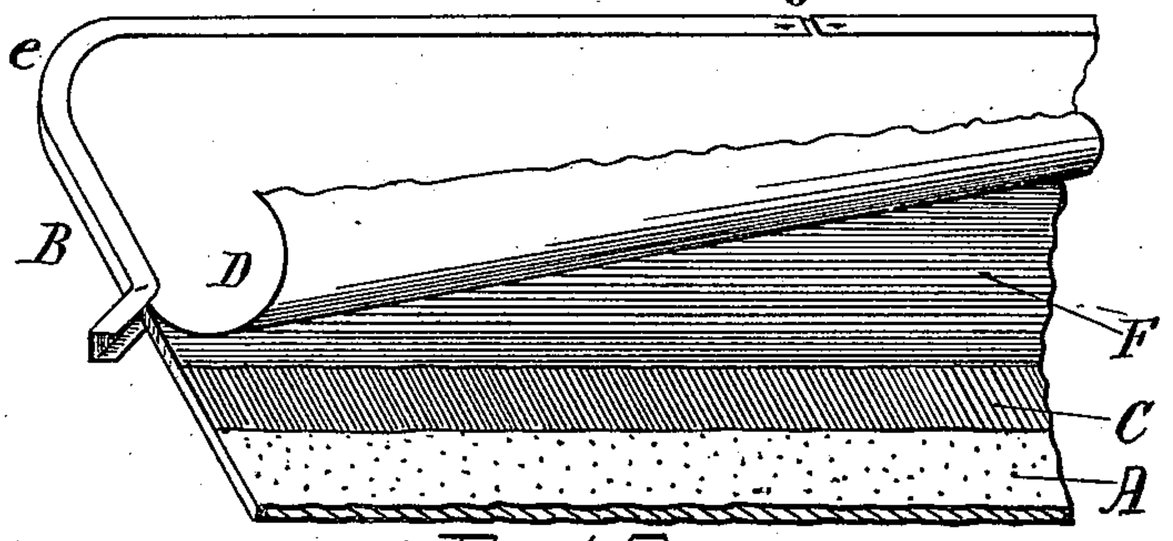

FIG. 2

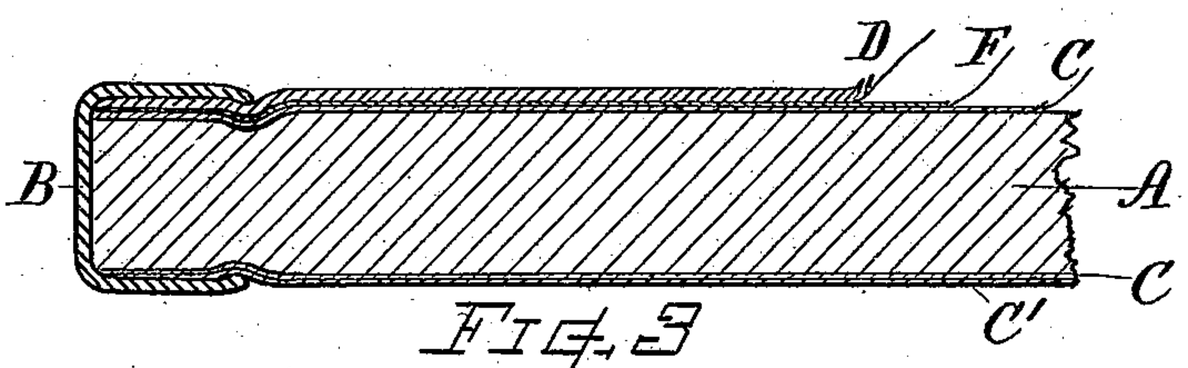

FIG. 3

Witnesses.

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MOUNTED DRAFTING-SHEET.

SPECIFICATION forming part of Letters Patent No. 551,003, dated December 10, 1895.

Application filed March 2, 1895. Serial No. 540,288. (No specimens.)

To all whom it may concern:

Be it known that we, WILLIAM E. SAWTELLE and EDWARD W. SHEDD, of the city and county of Worcester, in the State of Massachusetts, and OLIVER PERRY SARLE, Jr., of the city and county of Providence, in the State of Rhode Island, citizens of the United States, have invented a new and useful Mounted Drafting-Sheet, of which the following, together with the accompanying drawings, is a specification sufficiently full, clear, and exact to enable persons skilled in the art to which this invention appertains to make and use the same.

The object of our invention is to provide a durable drafting-sheet suitable for assessors', city engineers', or corporation maps and for similar uses where original maps or delineated plans require to be frequently handled and used, as in the city departments, which sheet will efficiently stand the uses without becoming warped or bent and which will not cleave nor be injuriously affected by changes of humidity in the atmosphere or the various climatic changes to which it may be exposed. These objects we attain by the mounted drafting-sheet constructed as hereinafter explained.

In the drawings, Figure 1 is a front view of our mounted drafting-sheet. Fig. 2 is a perspective sectional view illustrating the construction, and Fig. 3 an enlarged vertical section through one edge of the sheet.

Our mounted drawing-sheet consists of a fiber-board body composed of heavy bookboard or tar-board prepared with a waterproofing or moisture-resisting coating or surface film applied upon both sides and having attached to its face a sheet of drawing-paper suitable for delineation thereon of the map or other drafts by the ordinary drafting methods, said face being uniformly and permanently attached to said body by a waterproof or non-absorptive adhesive substance, and the whole reinforced or bound about its edges with a metal binding folded over and embracing the body and facing with a clinch-grip, the binding being preferably provided with narrow intervals that allow slight expansion and contraction.

The process of making this new article of manufacture is as follows: We take thoroughly-seasoned fiber-board A, preferably that known in the trade as "No. 1 tar-trunk board," of about one-eighth inch, more or less, or, say, No. 9, in thickness, and of the required superficial dimension, say twenty-six by thirty-eight inches, more or less. This fiber-board we prepare by thoroughly coating it upon both sides with a moisture-repelling coating C, of orange or white shellac. When this is dry, we add a second coating C′ on one side and thoroughly dry the same. We then apply to the other side a further coating of the shellac F, and before it sets or hardens lay thereon a sheet of drawing-paper D, preferably of the kind known as "Whatman's cold-pressed," and rub the same down thoroughly to make it uniformly adhere to the body by the intervening impervious film of shellac. A heated smoothing-iron is then passed over the face of the sheet, rendering the delineating-surface uniformly smooth and insuring the firm integration and adhesion of the adjacent fibrous surfaces and intervening moisture-repelling film. The edges are then trimmed square and even and a metal binding-strip B is compressed onto the edge in the form shown in Fig. 3, binding the body and facing together and forming a protecting-guard that prevents abrasion of the edges by handling and rough usage. The corners *e* are preferably rounded, as shown. The binding is best formed of incontiguous sections or made with narrow spaces *b* in the straight sides, which allow slight expansion and contraction without straining the binding at the corners of the sheet.

If desired, the field of the sheet may be squared or made with the edges at the sides and ends at right angles to each other, so that a draftman's T-square can be used directly upon the edge of the mounted sheet.

These drafting-sheets, made as shown and described, are of great practical utility for maps and plans such as used in the city departments and for similar purposes, as they are very durable and can be handled with facility, set up on edge in racks, and subjected to much and severe usage and to the changes of humidity and temperature without becoming warped, distorted, damaged, or torn, while

alterations and additions to the delineations thereon can be made at any time with ready facility.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. A mounted drafting sheet, comprising a body of fiber-board having an imperviously coated exterior, a facing of drawing paper, an intermediate moisture-repelling film attaching said facing to the body, and a metal protector or binding secured upon the edges of the sheet.

2. In a mounted drafting sheet, the combination with the fiber-board body and facing of drawing paper attached thereto, of the metal binding folded upon and attached to the edge by a clinch grip, said binding being formed of incontiguous sections, or with narrow open spaces at the respective straight sides of the sheet, for the purpose set forth.

3. The mounted drafting sheet, composed of a thick fiber-board body preparatively coated upon both its top and bottom surfaces with shellac, a delineating surface formed of drawing paper laid upon and attached to said body by a second applied film of shellac, its face made flat and even by pressure applied while such shellac is in soft condition, and having its field made square and its edges bound with a protecting strip folded upon and confining the body and facing together, substantially as described.

Witness our hands this 27th day of February, A. D. 1895.

WILLIAM E. SAWTELLE.
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Witnesses:
CHAS. H. BURLEIGH,
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