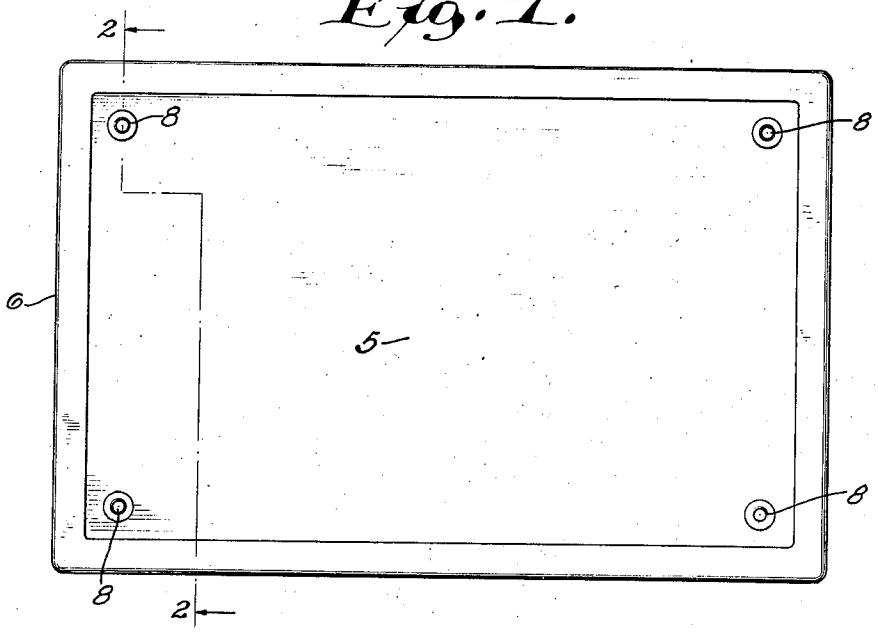
Jan. 16, 1940. W. C. JOHNSON 2,187,157

SETTING-OUT BOARD

Filed Sept. 1, 1938

Fig. 1.



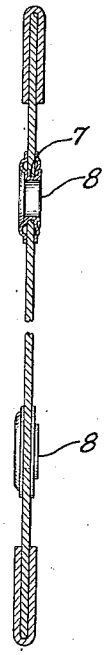


Fig. 2.

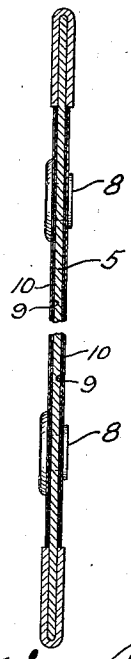
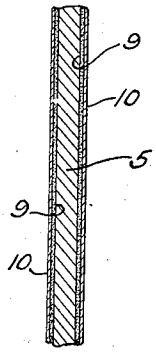


Fig. 4.

Fig. 5.



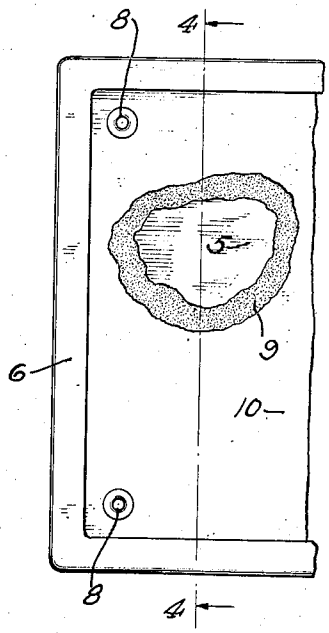


Fig. 3.

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UNITED STATES PATENT OFFICE

2,187,157

SETTING-OUT BOARD

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Application September 1, 1938, Serial No. 227,913

2 Claims. (Cl. 149—12)

This invention relates to an improvement in setting-out boards for use in setting out hides, skins, or leather for the purpose of stretching and drying the same.

In one step in the manufacture of leather it is customary to smear the hides, skins, or leather with adhesive and then flatly apply the same in a stretched condition to the surface of a setting-out board after which the board is hung or suspended in a drying rack and the leather dried. After the leather is dried it is stripped from the board.

One of the objects of the present invention is to provide a setting-out board of this character which is simple and of lightweight construction, easily handled, economical to produce, and which presents a suitably smooth plane surface and one which will stand up under repeated uses, will not peel, is substantially inert to the acid, alkali, dye stuff and the like of the leather so that pitting is minimized, and will not tend to buckle.

Other objects and advantages reside in certain novel features of the construction, arrangement, and combination of parts which will be hereinafter more fully described and particularly pointed out in the appended claims, reference being had to the accompanying drawing forming a part of this specification, and in which:

Figure 1 is a view in elevation showing a setting-out board embodying the present invention;

Figure 2 is a view in transverse vertical cross section taken on line 2—2 of Figure 1.

Figure 3 is a fragmentary view similar to Figure 1 but showing the board treated to provide its surfaces with an oil covered sulphate film;

Figure 4 is a view in cross section taken on line 4—4 of Figure 3; and

Figure 5 is a fragmentary section view taken on an enlarged scale to illustrate more clearly the relationship of the oil coated film to the body portion of the board.

Referring to the drawing, it will be seen that the setting-out board embodying the present invention is designated generally at 5 and is constituted of a rectangular sheet of metal, the margin of which may be reinforced by edging or metal strips 6 suitably fastened to the metal of the board. Openings 7, which may be reinforced by eyelets 8, are provided adjacent the corners of the board to facilitate its hanging or suspension in a drying rack.

The board is constituted of aluminum or an aluminum alloy composed of aluminum, magnesium and manganese. Various metals may be used to constitute the body portion of the board. Specifically, any one of the aluminum or aluminum alloy materials identified in the following list may be advantageously employed:

Aluminum Co. Symbol No.	Brinell hardness	Percent manganese	Percent magnesium	Percent aluminum
2 SH	38	0	0	99
3 SH	55	1.25	0	97
4 SH	80	1.25	1.0	96

A board so constituted may be advantageously used under many circumstances but its adaptability for its intended use, its durability and its other desirable properties may be materially enhanced by especially treating one or both surfaces of the board. The treatment embodies the subjection of the surfaces of the board to the action of sulphuric acid. The concentration of the acid which is employed in an aqueous solution may be varied in acordance with the effects desired. Usually an aqueous solution of 50% acid and 50% water is applied. The acid not only cleans the surface of the board but forms thereon a film of sulphates, designated at 9, which tends to inhibit the action of the alkalies and the acids in the leather. After the treatment with the acid, the surface is wiped with oil which further tends to inhibit the action of alkalies and acids on the leather or to minimize their action and also has the advantage of preventing the hides, skins or leather from sticking too tightly to the board. Neat's-foot oil, cotton seed oil, or other various mineral or vegetable oils may be employed. A light strata or coating of the oil remains on the plate. In the drawing, the film 9 and the coating or strata 10 of the oil are much exaggerated for the sake of illustration.

A board so constituted has not only the advantages mentioned but is sufficiently stiff that it will not kink, bend or buckle and yet is easily handled.

While I have shown and described one construction in which the invention may be advantageously embodied, it is to be understood that the construction shown has been selected merely for the purpose of illustration or example and that various changes in the size, shape and arrangement of the parts may be made without departing from the spirit of the invention or the scope of the subjoined claims.

The invention claimed is:

1. A setting-out board of the character described comprising a sheet-like body portion constituted of aluminum alloy and having a film of

sulphates on at least one surface thereof and means for protecting said sulphate film from the action of fluids contained in wet skins, and for simultaneously controlling the degree of adhesion between the said film and wet skins, said means comprising a coating of oil applied to said sulphate film.

2. A setting-out board of the character described comprising a sheet-like body portion constituted of aluminum alloy and having a film of sulphates on at least one surface thereof and means for protecting said sulphate film from the action of fluids contained in wet skins, and for simultaneously controlling the degree of adhesion between the said film and wet skins, said means comprising a coating of neatsfoot oil applied to said sulphate film.

WILLIAM C. JOHNSON.