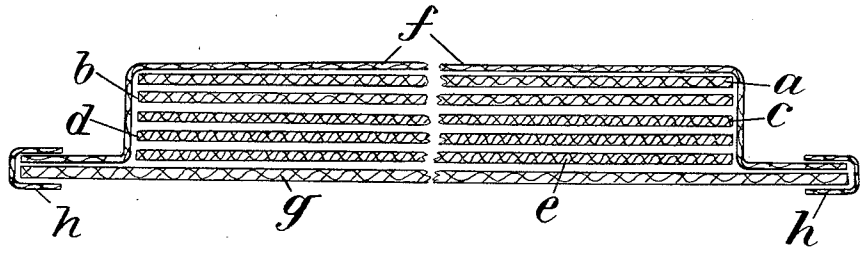
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FABRIC PAD FOR LAUNDRY AND LIKE PRESSES

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FABRIC PAD FOR LAUNDRY AND LIKE PRESSES

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This invention has for its object to provide an improved fabric pad for use upon the lower perforated platen through which steam and air pass to assist in the setting or shaping of the clothing which is being pressed between such lower platen and an upper platen in a laundry or like press of the Hoffman type.

It will be appreciated that the combined action of heat, moisture and pressure upon the fabric pad is very severe and when such pads have an organic textile base they have to be discarded frequently, usually after only a few weeks' life, because either the textile base has become so weak that it has fallen to pieces or the pad has consolidated to such an extent that the steam and air will no longer pass through it in sufficient quantity. It will be appreciated further that the replacement of the pads is not only a matter of expense but it involves a considerable loss of the output capacity of the press.

Proposals have been made to use asbestos fibres in the manufacture of the aforesaid pads because such fibres do not lose or substantially lose their strength in service but it is found that the action of heat, moisture and pressure thereon causes the pads to consolidate rapidly so that they are not suitable for use after a few weeks wear because steam and air can no longer pass through them.

The improved pads produced in accordance with this invention have asbestos as the main textile base but they overcome the defect of asbestos pads as previously used or proposed for use. They can operate satisfactorily without change for periods of many months, which ensures economy in the cost of replacing pads, enables the presses to be kept in more continuous operation, and gives an improved quality of work from the pressing operation due to the consistent nature of the pads.

A pad in accordance with this invention comprises a number of layers of open mesh asbestos cloth impregnated with a synthetic resin, and covered by a cover of asbestos cloth of fine quality also resin impregnated and secured to the bottom layer.

The invention further comprises a pad containing a number (preferably five) of layers of open mesh asbestos cloth, the upper layer or layers being less coarse than the lower layer or layers, all the layers being resin impregnated and containing from 5 to 25% by weight of resin, a cover of fine quality asbestos cloth containing up to 10% by weight of resin, a bottom layer of open mesh asbestos cloth resin impregnated and of larger dimensions than the other layers, and means securing the cover to the bottom layer.

The accompanying diagram is a sectional view through a pad constructed in one convenient form in accordance with this invention. The pad comprises five layers *a*, *b*, *c*, *d* and *e* of relatively open mesh asbestos cloth, the coarseness of the layers *c*, *d* and *e* being greater than that of *a* and *b*. Each piece of fabric is resin impregnated. Over the said asbestos fabric layers is a covering *f* of a fine quality asbestos fabric which has also been resin impregnated, and the edges of the covering *f* and of a base layer *g* (which is an open mesh asbestos fabric) are inter-connected by the fine asbestos binding tape *h* which is also resin impregnated.

As an example of the qualities of asbestos cloth used in the construction of a pad in accordance with this invention we give the following particulars.

Layers *a* and *b* are made of an asbestos cloth of approximate weight 18¼ oz. per sq. yard with 11 ends per inch warp and 11 picks per inch weft. Layers *c*, *d*, *e* and *g* have an approximate weight of 24 oz. per square yard with 8 ends per inch warp and 8 picks per inch weft. The cover *f* has an approximate weight of 9 oz. per square yard with 27 ends per inch warp and 17 picks per inch weft. Generally speaking the weight per sq. yard of any of the layers of fabric should be between 6 and 50 oz. The warp ends per inch should be between 6 and 40 and the weft picks between 6 and 24 per inch.

The impregnation of the layers and cover is made with a synthetic resin applied thereto in the form of an aqueous or spirit solution or emulsion or in the form of an aqueous precondensate. The layer is then dried and in the case of a thermo-hardening resin it is heat treated to produce the insoluble resin. The top or upper cover *f* is preferably only lightly impregnated with resin and contains up to 10% of resin. The lower cover *g* is preferably resinated in the same manner and to the same extent as the layers *a*, *b*, *c*, *d* and *e* inside the cover and contains between 5% and 25% of added resin.

In practice, it is found that the resin cements the fibres of asbestos together and effectively prevents consolidation due to pressure and particularly prevents the fibres spreading out and blocking the openings in the fabric that allow the steam and air to pass through. Thus throughout the life of the pad the initial capacity of the pad for allowing the passage of the steam and air is maintained. In addition, the highly resinated yarns in the fabric form bridges of a slightly springy character which confer upon the pad a

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small but desirable degree of resiliency. This also is maintained throughout the life of the pad. In consequence, the pad behaves with great uniformity throughout its life and the resulting work comes out of the press with great consistency and is of very high quality.

An additional advantage of our improved pad is that it can be fitted without the copper gauze which normally is fitted immediately on the top of the perforated platen of the press to ensure the even distribution of steam and air.

What we claim is:

1. A fabric pad for laundry and like presses, comprising a plurality of superposed layers of open mesh woven asbestos cloth, a plurality of layers of woven asbestos cloth of less coarse texture, superposed on the first-mentioned layers, and a top layer of fine quality woven asbestos cloth, the edges of which are secured to the edges of the bottom layer of the first mentioned layers, the asbestos yarns forming the various layers being impregnated with a synthetic resin.

2. A fabric pad for laundry and like presses, consisting of four superposed layers of open mesh woven asbestos cloth, the bottom of such layers being of greater area than the other layers, two layers of woven asbestos cloth of less coarse texture superposed on the first mentioned layer, the asbestos yarns forming the layers being impregnated with a synthetic resin and containing from 5 to 25 per cent by weight of the resin, a top layer of fine quality woven asbestos cloth, the yarns of which are impregnated with a synthetic resin the said resin being present in amount up to 10% by weight, and a binding tape of fine asbestos impregnated with synthetic resin for securing the edges of the top layer to those of the bottom layer.

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