S. A. GRIFFITH.

Plasters.

No. 209,560. Patented Nov. 5, 1878.

Fig. 1.

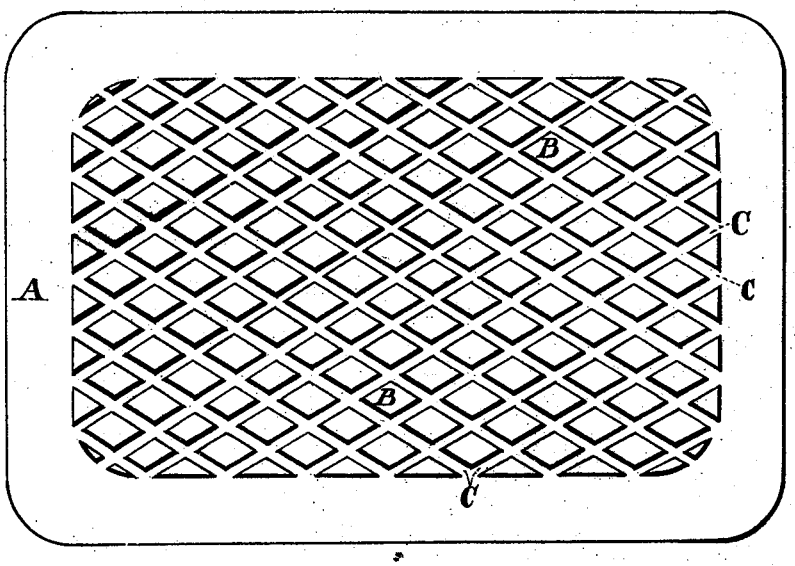
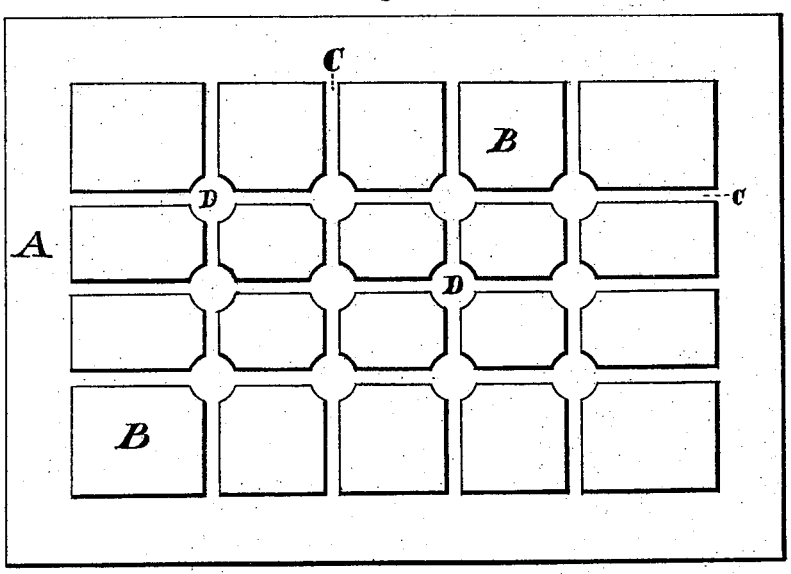


Fig. 2



Attest:

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UNITED STATES PATENT OFFICE.

SMITH A. GRIFFITH, OF GREEN TOWNSHIP, HAMILTON COUNTY, OHIO.

IMPROVEMENT IN PLASTERS.

Specification forming part of Letters Patent No. **209,560**, dated November 5, 1878; application filed December 17, 1877.

To all whom it may concern:

Be it known that I, SMITH A. GRIFFITH, of Green township, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Plasters, of which the following is a specification:

My invention relates to that description of plasters employed in the practice of pharmacy which consist of a flexible base or foundation for the reception of the plaster proper, the latter being spread out upon the base. Such descriptions of plasters are applied to the body by placing the plaster proper next the skin.

My invention consists, first, in providing the plaster with channels, or channels and reservoir-spaces, as more particularly hereinafter set forth.

The particular advantages derived from this portion of my invention are as follows: During the application of the plaster to the body these channels collect and convey away the perspiration, moisture, and humors exuding from that portion of the body beneath the plaster. The presence of the channels contributes to make the plaster adhere more closely to the skin, and increases the effect of the plaster, as they prevent the formation of air-cells between the plaster and the skin. The effect of the presence of air-cells is to weaken the power of the plaster to adhere to the skin, and also to prevent the plaster from coming into that close contact with the skin necessary to produce the best results.

Plasters composed of the gums, balsam, or medicinal agents containing like properties serve to increase the flow of perspiration from the part beneath the plaster, and to stimulate such part to throw off at its surface the effete matter of the system. These channels enable the plaster to aid nature in proper and rapid performances of this function, as they convey away the perspiration or other matter exuding from the body where the channels occur. The presence of the channels also increases the flexibility of the entire plaster, enabling it to conform perfectly to the part of the body to which it is applied.

The object of the reservoir-spaces is to supplement the advantages derived from the channels by providing spaces additional to those occupied by the channels, wherein the perspiration, humors, &c., from the skin can be readily received and collected to be conveyed away. The aforesaid facilitate the beneficial action and effect of the plaster, and relieve that part of the body which is beneath the plaster of what, if compelled to remain, would poison it.

The second portion of my invention consists in combining, with a plaster disposed according to the first part of my invention, an absorbent base, whereby such of the said moisture, &c., of the body as is received in the channels or reservoir-spaces and does not flow through the channels is absorbed by said base and carried off.

In the accompanying drawing, Figure 1 represents a plaster provided with channels, and Fig. 2 a plaster provided with channels and reservoir-spaces.

A indicates a sheet of some material, preferably absorbent in character, as cloth, leather, paper, &c., forming the foundation for the plaster to rest on.

The plaster B may be of any description suitable for the purposes of pharmacy. It is disposed upon the base A of spots of any desired shape. Preferably these spots are of a diamond shape, as shown in Fig. 1; but they may be of the form shown in Fig. 2, or any other desired shape. Between these spots are the channels C. Reservoir-spaces D, connected to the channels C, are shown in Fig. 2. The sides of the channels and reservoir-spaces are formed by the adjacent spots of plaster, and the bottom of the same is the base A.

The base employed may be a non-absorbent base, and the first part of my invention combined therewith; but in such case the advantages resulting from the direct conveyance off of the perspiration, humors, &c., through the base at the bottom of the channels or reservoir-spaces are wholly lost. For these reasons I prefer to employ an absorbent base. When preferred, the reservoir-spaces may be dispensed with.

It is evident that the shape of the plaster-spots may be infinitely varied, and the course of the channels also be varied, and the combination of channels and plasters will still be of my invention, the main feature of the latter

being the formation or introduction of channels within the plaster for the reception and conveyance off of said perspiration.

As the combination of the channels and reservoir-spaces is, further, of my invention, the number of reservoir-spaces, their arrangement with reference to the channels, as well as the direction of the channels with reference to them, may be varied to suit the taste of the party manufacturing the plaster. In all such variation it is desirable—in fact essential—that the reservoir-spaces should connect with the channels, or at least with one channel, in order that the moisture and matter collected therein be carried off.

Preferably the channels should have an outlet at the edge or edges of the plaster, in order that they may best serve their function of drains to convey the moisture, &c., rapidly from every portion of the plaster.

I am aware that plasters with perforated bases to facilitate the escape of perspiration have been used; but such a construction is not effective, as the entire surface of the skin is covered by the plaster, which soon becomes soft and spreads beneath the openings. A further objection is, that the plaster, when it softens, exudes through the openings and injures the clothing of the wearer.

My improved plaster covers only a portion of the surface inclosed within the area of the plaster. The channels all communicate, so that the moisture can find free vent, and the absorbent base covering these channels takes up and discharges much of the moisture as quickly as the channels are filled.

I claim—

1. A plaster having a continuous imperforate base, upon which the preparation is arranged in sections, leaving intervening communicating spaces or channels covered by the base, as set forth.

2. The combination, in a plaster, of the absorbent base and the preparation arranged thereon, to leave intervening spaces or channels, through which perspiration can pass to the base, as set forth.

S. A. GRIFFITH.

Attest:
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