

P. H. LEE.
UNDERGARMENT.

No. 179,661.

Patented July 11, 1876.

Fig. 1.

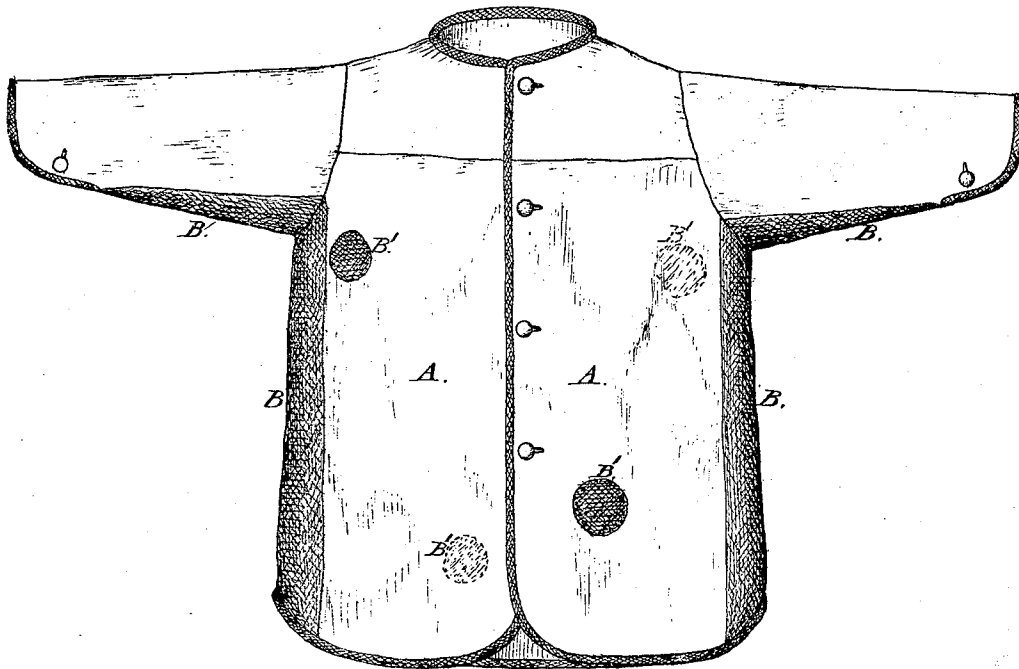
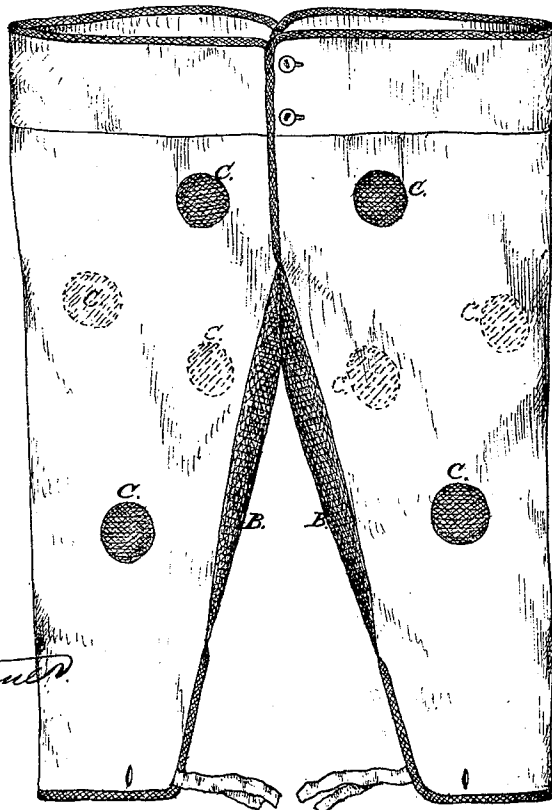


Fig. 2.



Witnesses:

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att'y.

UNITED STATES PATENT OFFICE

PHILO H. LEE, OF BINGHAMTON, NEW YORK.

IMPROVEMENT IN UNDER-GARMENTS.

Specification forming part of Letters Patent No. **179,661**, dated July 11, 1876; application filed January 6, 1876.

To all whom it may concern:

Be it known that I, PHILLO H LEE, of the city of Binghamton, county of Broome, and State of New York, have invented new and useful Improvements in Under-Garments; and that the following is a full and exact description thereof.

My invention relates to under-garments made of completely or partially tanned skin of an animal firmly united to any more porous material suitable for clothing, and being firmly attached to the skin completely about and near to the apertures.

The object of my invention is to obtain an under-garment, constructed mainly of the partially or completely tanned skin of an animal, which will protect the person of the wearer, or any selected part of the person, from cold or currents of air, and at the same time afford adequate means for the passage of air outwardly through the garment, to carry out perspiration and other moisture and odors, and which shall be flexible and enduring, and not liable to shrink and warp out of shape, and which shall at once keep the person of the wearer uniformly warm and dry.

To these ends my invention consists in an under-garment whose main material is the partially or completely tanned skin of an animal, and whose subsidiary material is any fabric suitable for clothing, and being more porous than the principal material, the two being securely united, so that the entire thickness of the garment, at one or more than one desired place, shall be exclusively of the more porous material, while the thickness of the garment at all other points shall be exclusively of such skin, or shall be partly of such skin and partly of the more porous material, the more porous material being firmly inserted between the skin portions of the garment, and extending from end to end of the body of the garment, or of the limb or limbs of the garment, or of both body and limbs of the garment; and my invention further consists in firmly securing to the skin portion of the garment coverings for apertures made therein, such coverings being constituted of the more porous material.

In the drawings hereof, Figure 1 represents an under-shirt, and Fig. 2 a pair of under-

drawers, constructed in accordance with my invention.

A represents pieces of skin, in this instance buckskin. B B indicate pieces of more porous material, in this instance cotton cloth.

In Fig. 1 the pieces of cotton cloth are interposed between the back and one front piece along each entire side of the main part of the shirt, and also between the edges of the piece or pieces of skin which constitute the main portion of each sleeve.

In Fig. 2 the cloth is interposed between the edges of the piece of skin which mainly forms each leg of the drawers. Thus the pieces of more porous material are interposed where the seams of under-garments usually occur, and extend the entire length of the body of the under-garment, and, it may be, of one or more of its limbs. By this construction the bodies and limbs of skin under-garments are made more yielding to the stress laid upon them by the body or limbs of the wearer when in a sitting or bending posture, or when the limbs of the person are bent. The stress on the garment in such postures of the wearer is crosswise of its body or limbs, and nearly at right angles to its seams. In a garment entirely of skin, the thread, having to hold two thicknesses of bulky and unrelaxing material, is apt to break, whereupon the pieces of skin part. Furthermore, two pieces of skin overlapping each other render the garment cumbersome, rigid, and abrasive at the places where the greatest stress on the garment and compression on the person are liable to occur; also, when two pieces of skin overlap and are sewed together, the grain of the pieces of skin is liable to run in different directions, and they, therefore, strain and shrink in different directions, and, consequently, strain the seam, and also twist and warp the garment out of shape. The pieces of more porous material securely interposed between entire pieces of skin remove these defects from the garment.

The more porous material may be securely interposed over or under, or both over and under, apertures made in a piece or the pieces of skin, as shown at B' in Fig. 1, and at C in Fig. 2, as well as interposed laterally between separate pieces of skin, as shown at B'.

In locating the more porous material, it is advantageous that the different kinds of material should be so relatively arranged as respects each other and the person of the wearer that the parts of the body covering vital organs, or those naturally or by reason of abnormal weakness needing protection from cold, shall be covered by the skin, while, on the other hand, the less sensitive parts of the body, or those which more freely exude perspiration, will be covered by the subsidiary and more porous material of the garment.

I mention as valuable for the more porous material any knit, woven, felted, or piled, (cut or not,) or other fabric or cloth suitable for clothing; but I do not confine myself to any specified subsidiary material, but include as within my invention as subsidiary material any material suitable for clothing and more porous than the partially or completely tanned skin of an animal, which is the principal material of the under-garment.

I am aware that some skin garments have been apertured, and have been gored with cloth at the armpits and groin only, and that cloth garments have been lined with perforated skin unattached at the perforations; but in these latter structures the body of the

wearer is directly or indirectly exposed to contact with cold and with currents of air. Neither of these constructions touches my invention.

I claim—

1. In a skin under-garment, the combination of apertures B, such as are described, with coverings for the apertures, the coverings being made of a material more porous than such skin, and being firmly secured to such skin, near to and completely about the several apertures, for the purpose described.

2. In a skin under-garment, constructed as above described and claimed, the additional apertures B, covered by more porous material, and interposed between the skin portions throughout the longitudinal seams of the body or of the limbs of the garment, as described and shown, whereby the person is protected from cold and abrasion, and the garment is ventilative and relieved from warping and strain, as set forth.

PHILO H. LEE.

Witnesses:

G. H. PRATT,
GEO. PRATT.