No. 751,302.

PATENTED FEB. 2, 1904.

E. L. KRAFT & C. P. YOUNG.

APPLICATION FILED AUG. 22, 1903.

NO MODEL.

Fig. 1.

Fig. 2.

Witnesses Plawlingo Withfolioren born Edward Straff Charles of January, 334 Davier Davis

attorners

United States Patent Office.

EDWARD L. KRAFT AND CHARLES P. YOUNG, OF YORK, PENNSYLVANIA.

APPAREL-PAD.

SPECIFICATION forming part of Letters Patent No. 751,302, dated February 2, 1904.

Application filed August 22, 1903. Serial No. 170,452. (No model.)

To all whom it may concern:

Be it known that we, EDWARD L. KRAFT and CHARLES P. Young, citizens of the United States, residing in York, county of York, and 5 State of Pennsylvania, have invented certain new and useful Improvements in Apparel-Pads, of which the following is a specification, reference being had therein to the accompa-

nying drawings.

In pads or dress-forms of this sort numerous constructions have heretofore been devised and patented. In some air-tight flexible casings adapted to be inflated have been resorted to to obtain the necessary shape and 15 flexibility. In others a covered framework of flexible wire or rods have been employed, while in still others a fibrous packing material has been used. All these attempts to produce the ideal pad or form have failed for one 20 or more of the following principal causes: They lack durability, they are expensive in material or manufacture, they absorb perspiration from the body and soon become foul, they lose their elasticity and soon pack or 25 harden and lose their shape, they are unnecessarily heavy, they interfere with ventilation and are therefore hot and uncomfortable in warm weather, and in the case of pneumatic pads they are liable to deflation by puncture. It is the object of our invention to avoid

these objections and approach more nearly to the ideal article; and to this end we provide a pad which shall be extremely light in weight, flexible, durable, non-absorbent, easily cleanable should it become foul, elastic, self-ventilating in the highest degree, more artistic in that it more closely simulates flesh in appearance and to the touch through the clothing, non-collapsible, retains its shape until worn out, and shall not require a cloth covering, as more fully hereinafter described.

The invention, broadly considered, consists in constructing the pad of multicellular, membranous, non-fibrous, non-absorbent elastic material, a single piece of homogeneous material being preferably used and the pad being properly shaped by molding it or cutting it to the desired shape from a block of the multicellular material.

In the drawings, Figure 1 represents a cross-

section of a bust-pad approximately concavoconvex in cross-section, and Fig. 2 an en-

larged detail section.

Any suitable elastic membranous material may be used; but rubber is preferred, as that 55 is the cheapest and best for the purpose. The outer cells are open to the atmosphere, and practically all the cells communicate with each other, so that the pad will yield readily at any point, and the walls of the cells are formed of 60 a very thin and flexible membrane. Such a pad need not be covered with cloth or other material, as it will retain its normal shape unaided and will wear practically as long as the wearer has need for it. The open cellular 65 structure provides for thorough ventilation or aeration, especially as every time it is distorted from its normal shape and is restored by its own elasticity a circulation of air is caused. The pad not being of fibrous mate- 7° rial is non-absorbent, but may be readily cleaned with water should it become foul, and it may be made so light as to be inappreciable in weight to the wearer. It will not pack or harden under long usage and will not lose its 75 shape by being torn or punctured, and, furthermore, it very closely resembles flesh to the touch as well as in appearance through the wearer's clothing.

It is obvious that the pad may be adapted 80 for any part of the body without departing from the invention in the least. It is obvious also that the cells may be any shape desired, regular or irregular. In the drawings annexed they are shown irregular and some-85

what elongated.

Having thus described the invention, what is claimed is—

1. An apparel-pad constructed of multicellular material, the walls of the cells being 9° formed by a thin membrane and the cells extending throughout the body of the pad.

2. An apparel-pad consisting of a single piece of homogeneous multicellular elastic material so as to normally retain its shape, the 95 walls of the cells being formed of thin elastic membrane.

3. An apparel-pad constructed of a single piece of homogeneous non-absorbent material multicellular throughout the walls of the cells 100

being formed of a thin membrane and the cells communicating with each other and with the atmosphere, the cells being normally open or expanded to permit air to pass readily

5 through the pad.

4. An apparel-pad constructed of multicellular elastic material, the walls of the cells being formed by a thin membrane, said pad being thicker at its center and tapering in all 10 directions toward its edge.

5. An apparel-pad constructed of multicellular material, the walls of the cells being

formed of a thin membrane, said pad being convex in its outer side and convex on its inner side and thicker at its center and tapering 15 in all directions toward its edge.

In testimony whereof we hereunto affix our signatures, in the presence of two witnesses,

this 19th day of August, 1903.

EDWARD L. KRAFT. CHARLES P. YOUNG.

Witnesses:

THOMAS SHILDT, L. P. Gross.