

Oct. 13, 1942.

T. J. CALLAN ET AL

2,298,927

IRONING PAD

Filed Dec. 5, 1940

Fig. 1.

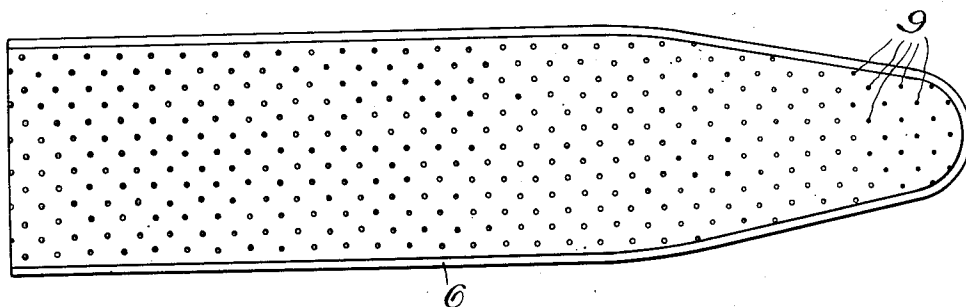


Fig. 2.

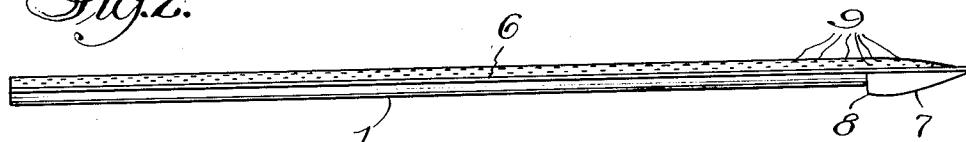
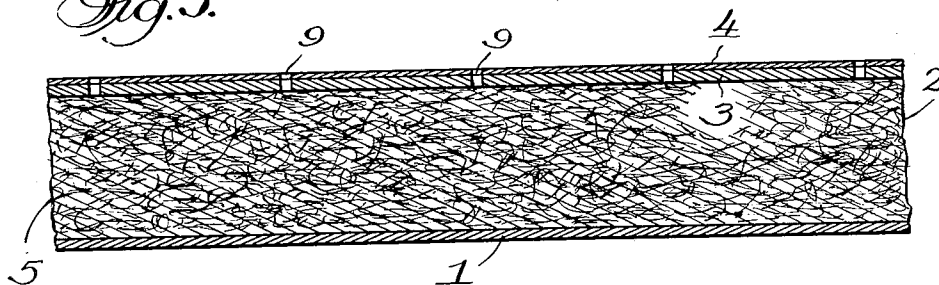


Fig. 3.



Witness:
Chas. L. Foursch.

INVENTOR.
Terence J. Callan
By *Victor L. Erickson,*
Parkinson & Lane, Attys.

UNITED STATES PATENT OFFICE

2,298,927

IRONING PAD

Terence J. Callan, Park Ridge, and Victor L. Erickson, Chicago, Ill., assignors to Welmaid Products, a partnership consisting of Terence J. Callan and Victor L. Erickson, Chicago, Ill.

Application December 5, 1940, Serial No. 368,640

3 Claims. (Cl. 38-140)

This invention relates to a pad for ironing boards, tables, or other supports upon which such pads are used. More particularly this invention relates to an improvement in either or both the top and bottom surfaces of pads and covers, or other soft or resilient devices commonly used on ironing boards, tables or similar supports to provide the necessary cushioning for proper ironing to enable the proper dissipation and handling of the heat and steam generated during ironing, and to provide a suitable and durable operating surface for such pad.

The operation of ironing involves first moistening the articles about to be ironed, which is followed by the dissipation or evaporation of this moisture under moving heat and pressure to remove the wrinkles and produce the smooth finish desired in articles being ironed. This is ordinarily accomplished by placing the article to be ironed over a soft resilient pad and moving thereover a heated iron or other ironing device.

Softness or resiliency in the ironing pad is highly desirable in order to protect buttons, embossing, embroidery or other projections on the surface of the article being ironed. Prior to the present invention the emphasis on assuring this softness and resiliency in the ironing pad has been so great that two other highly desirable features have been neglected. These two features are:

1. A smooth, wrinkle-free surface on the ironing pad to permit the iron to glide or move freely thereon, and to facilitate the removal of wrinkles from the article being ironed.

2. Porosity or susceptibility to the penetration of moisture through the cover of the ironing pad.

Some attempts have been heretofore made to achieve desired smoothness of the outer surface of the ironing pad cover by completely sealing such surface by a covering of metal, metallic foil or by the use of various waterproof, plastic coatings applied to the operating surface of the ironing pad. These attempts to achieve smoothness have not provided for the equally important element of porosity in the ironing pad and, in fact, have completely eliminated the porosity in the pad surface.

Ironing pads as heretofore constructed have several serious disadvantages which are overcome by the present invention. An attempt to eliminate the necessity of moistening the articles to be ironed has been made by a recent improvement in hand operated heated irons in which steam is generated in the shoe of the iron, such

steam being discharged into the article being ironed during the progress of the ironing operation through openings in the sole of the iron. Such ironing devices are currently known and referred to as "steam irons." An ironing pad having a sealed or waterproof ironing surface, or otherwise constructed to prevent the penetration of moisture, provides no release for this discharge of steam through the openings in the sole of the so often called "steam iron," in the event such type of iron is allowed to remain stationary on the surface of such ironing pad or moved too slowly thereover. Failure of the ironing pad to possess sufficient porosity in its construction to permit the normal release of steam from steam irons carries a potential hazard to the structure of the iron and to the operator thereof.

Moisture in the article being ironed, whether from initially moistening the article or introducing steam thereinto from a steam iron, must be evaporated or dissipated on the surface of a sealed or waterproof ironing surface, thus causing steam, vapors and odors to rise into the face of the ironing operator. Also when a sealed, waterproof or other smooth finish ironing pad cover is used, excessive heat is retained on the surface of the smooth sealed pad, thus creating a tendency to readily scorch the article being ironed and cause discomfort to the operator's hand while manipulating the iron.

Due to the necessity for softness or resiliency in the ironing pad, ironing pads not embodying our invention have resulted in too great an absorption of moisture by the pad, causing the pad to become moisture laden, and delay is caused in sufficiently drying the article being ironed and also in offering resistance to the free movement of the iron during the ironing operation.

Among the objects of our invention are to eliminate the objections and accomplish the advantages set forth above.

A further object is to combine the element of smoothness of ironing surface with porosity or permissibility of moisture penetration in the construction of an ironing pad.

A still further object is to provide such a combination of smoothness and porosity as to assure an ironing surface on an ironing pad such that will always remain dry due to the rapid dissipation of moisture downward through the pad, and yet have sufficient smoothness to remove wrinkles and produce the smooth finish desired in articles being ironed and which constantly

dry ironing surface materially lessens the time for the ironing operation.

Other objects, advantages and capabilities inherent in our invention will later more fully appear.

Our invention further resides in the combination, construction and arrangement of parts illustrated in the accompanying drawing, and while we have shown therein a preferred embodiment we wish it understood that the same is susceptible of modification and change without departing from the spirit of our invention.

In the drawing:

Fig. 1 is a top plan view of an ironing pad embodying our invention.

Fig. 2 is an edge view of the pad shown in Fig. 1.

Fig. 3 is a fragmentary enlarged vertical section through a portion of our improved pad.

Referring in detail to the drawing, our improved ironing pad comprises a backing 1, a cover designated generally at 2 and comprising the base 3 and coating 4 described more fully hereinafter. The backing 1 and the cover 2 are spaced apart a suitable distance, the space therebetween being filled with any suitable material 5 such as jute padding, cotton, hair, hemp, wool, paper, steel wool, rock wool, glass wool, asbestos or rubber products which will give a suitable soft cushion to enable buttons or other projections to be imbedded therein during the ironing operation and to return to their general shape thereafter, the ironing pad being of any desired thickness to give the most suitable results. The backing and cover (the top and bottom coverings) are sewed or otherwise secured together along their edges 6. The forward end of the pad is preferably provided with a pocket 7 sewed at its front and sides to the adjacent edges of the ironing pad and open at its rear end 8 to receive the front end of an ironing board or other supporting element. As will be understood, the filling 5 will act as a cushion to provide the desired softness and resiliency to receive the imprint of buttons, buckles or other projections as described above.

The cover 2 and the backing 1 with their sewed edges constitute in effect an envelope or bag receiving the filling material 5.

The coating 4 may be of any desired material possessing smoothness, resistance to moisture, resistance to decomposition by heat (thermo decomposition) and adaptability to smoothness of ironing operation and yet having such porosity due to the large number of small apertures formed therethrough to permit moisture and steam to penetrate through the cover and into the filling material and also back through said apertures out of the ironing pad. As will be understood, when the heated iron is passing over the articles being ironed or when a steam iron is being used it will not be necessary for the steam thus produced to pass out from underneath the iron solely around the edges of the iron, but such steam or moisture can pass through the apertures 9 which will be small in diameter and of considerable number as shown in Fig. 1.

The coating material 4 will in addition to having smoothness be more or less waterproof in nature, and will be of such nature that it will quickly and sufficiently dry and not be sticky after an ironing operation. This material is especially adapted for use on cellulose materials as, for example, cotton cloth, drill material and the like, and will protect such cloth, drill or the like against thermo decomposition.

A material suitable for the coating 4 is described in United States Letters Patent to Trolander and Wilson, No. 2,129,156, granted September 6, 1938, for "Coating composition." This

coating material has particular reference to a composition which can be used in contact with cellulose and other materials for permitting exposure of the same to temperatures normally destructive of the unprotected material, and to temperatures above those at which such material coated with nitro-cellulose base material or other cellulose ester base material is destroyed along with the protecting ester. The composition itself is capable of being subjected to temperatures above the limiting exposure temperatures for cellulose ester base compositions, without deterioration or loss of its valuable properties, which limiting temperature is 175° C. when cellulose acetate is the cellulose ester. The composition is resistant to oils, greases, acids, ozone and water, at high and low temperatures. At these high and low temperatures the composition is also flexible, tough and elastic.

While this coating material is not claimed to be entirely waterproof, it is so moisture resistant that the ironing operation is very greatly improved by the formation of the large number of small apertures 9 in the cover to permit passage therethrough of the moisture, steam and the like. This enables the moisture, steam or the like underneath the iron sole to pass downwardly through said apertures, laterally through the filling 5, and then upwardly through unobstructed apertures to find its way to the exterior of the ironing pad without discomfort to the operator. At the same time the nature of the coating 4 is such as to afford great smoothness in the ironing operation.

While we have referred to the particular coating material described in U. S. Patent No. 2,129,156, we wish it understood that we may use any other suitable plastic and pliable composition (that will sufficiently dry) directly to either the top or bottom surface of the ironing pad, so as to give smoothness of surface to the ironing pad while preserving its inherent permissibility of moisture penetration.

While we have shown in the drawing for illustrative purposes only, an ironing pad having a large number of small apertures, we wish it understood that our invention contemplates openings of various shapes which may be holes, slots or the like, and the cover subsequently coated or impregnated with any plastic or pliable composition to add smoothness to the ironing surface.

Also, if desired, we may use an ordinary ironing pad and apply over the top of the same an auxiliary cover or shield of any flexible material having its surface coated or impregnated as described above, and provided with perforations, slots or the like, said auxiliary cover or shield lying above an ordinary ironing pad to produce the results set forth earlier herein.

Having now described our invention, we claim:

1. An ironing pad combining the features of a covering made of a material that is impervious to moisture, smooth and protected against thermo decomposition and yet having spaced means for permitting moisture to pass therethrough at spaced distances to an inner soft porous padding; comprising a porous resilient body portion capable of moisture penetration, a cover on said body portion, said cover having a coating thereon of material resistant to decomposition of the cover at high temperature of an

iron passing thereover, said coating forming a smooth, wrinkle-free surface on the ironing pad so that the iron will glide freely thereover to facilitate the removal of wrinkles from the article being ironed, the coating also being moisture resistant, said cover having formed therein a large number of spaced perforations for enabling the passage of moisture through the cover while the iron is passing thereover, the portions of the cover between the spaced perforations being sealed, smooth and water-resistant.

2. An ironing pad having a cushion, a textile cover on said cushion, a coating on said cover, said coating being smooth and wrinkle-free and adapted to protect said cover against thermal decomposition at temperatures up to 175° C. and being itself resistant to decomposition at such temperatures, the coating being normally mois-

5 ture resistant during an ironing operation, the cover and coating being formed with a large number of spaced perforations enabling the passage of moisture through the cover while the iron is passing thereover, the portions of the cover between the spaced perforations being sealed, smooth and water-resistant.

10 3. In an ironing pad, a cushion having a cover, a coating on said cover, said coating comprising a sealing material that is smooth, wrinkle-free, moisture resistant and resistant to high temperatures, said cover and coating having a large number of spaced perforations to permit passage therethrough of moisture during the ironing
15 operation.

TERENCE J. CALLAN.
VICTOR L. ERICKSON.