

(No Model.)

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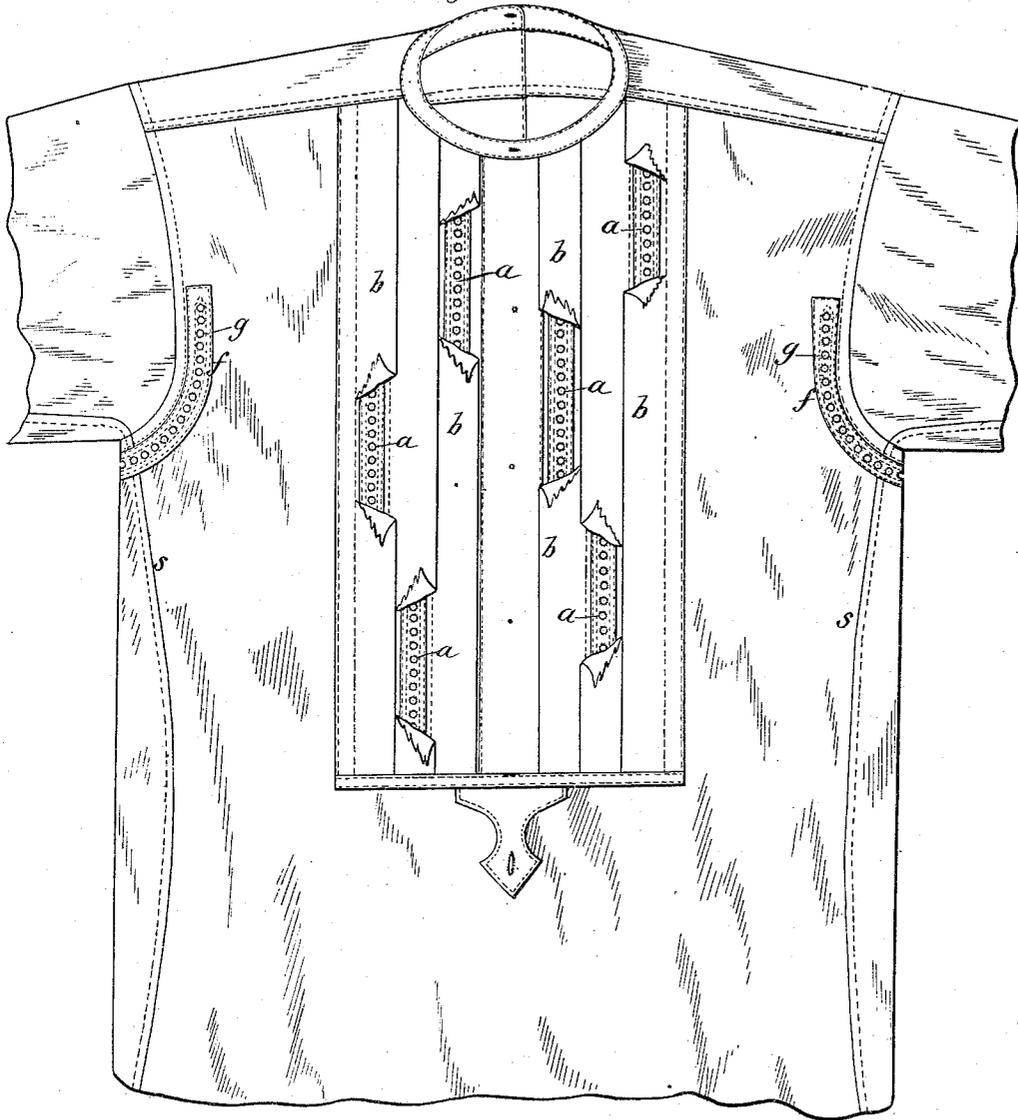
A. H. BRINKMANN.

SHIRT.

No. 317,711.

Patented May 12, 1885.

Fig. 1.



Witnesses:
R. E. Grant
J. H. Zimmerman

Inventor:
Augustus H. Brinkmann
by Johnson & Johnson
Atty.

(No Model.)

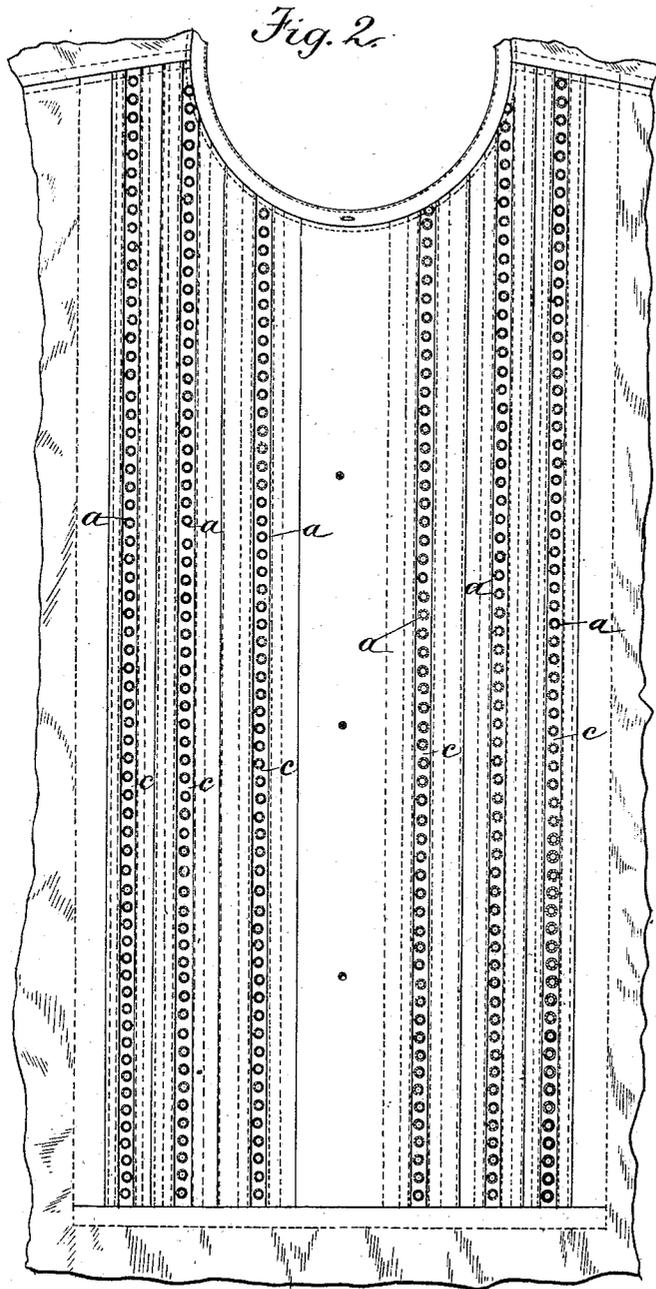
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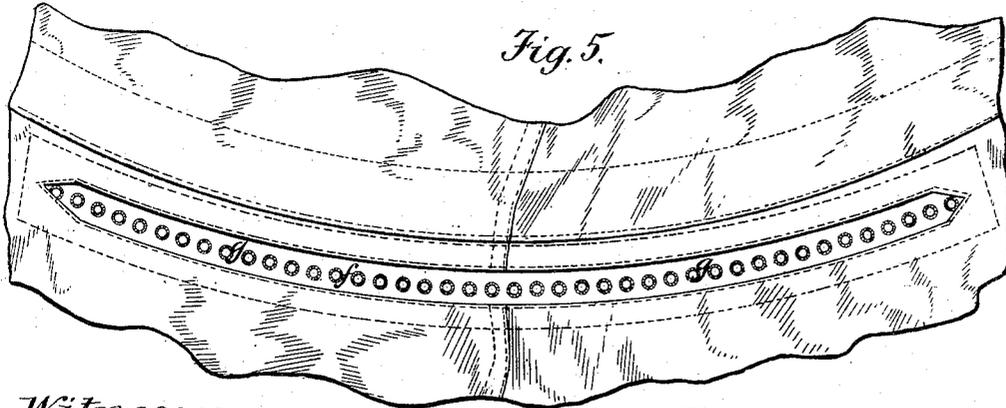
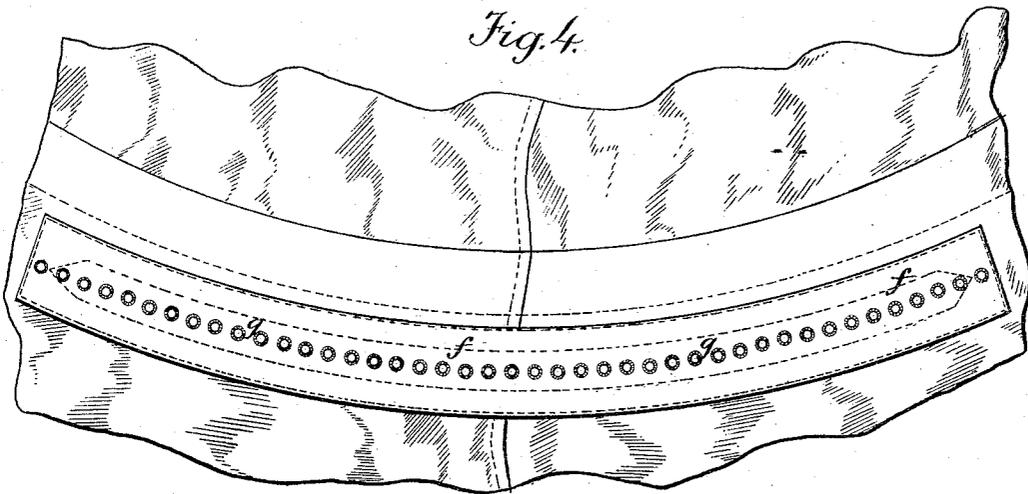
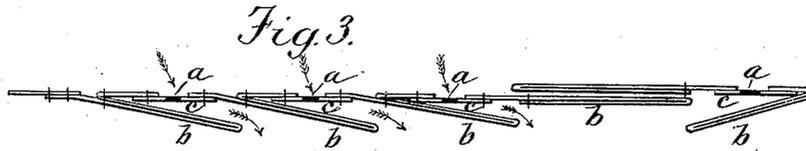
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A. H. BRINKMANN.
SHIRT.

No. 317,711.

Patented May 12, 1885.



Witnesses:
R. E. Grant
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Inventor:
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Atty.

UNITED STATES PATENT OFFICE.

AUGUSTUS H. BRINKMANN, OF BALTIMORE, MARYLAND.

SHIRT.

SPECIFICATION forming part of Letters Patent No. 317,711, dated May 12, 1885.

Application filed November 20, 1884. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTUS HERMAN BRINKMANN, a citizen of the United States, residing at Baltimore city, in the State of Maryland, have invented new and useful Improvements in Shirts, of which the following is a specification.

My invention relates to improvements in shirts; and the object of my improvement is the production of a shirt with a set-in plaited bosom having provision for ventilation, and set-in sleeves having provision for ventilation at the armpits, for the purpose of promoting the health and comfort of the wearer, and preventing the bosom from being soiled by sweat. The confining of the excretion from the pores of the breast is injurious to health; and the starched linen set-in bosom is practically impervious to the escape of the excretion through the pores and to the escape of the vapor from the evaporation of the sweat. My improvement, therefore, while affording ventilation at the starched bosom of the shirt for permitting the escape of what is known as "insensible" perspiration at the breast, gives the important advantage of aiding in the evaporation of the sweat and allowing the vapor to pass off through the set-in shirt-bosom. The provision in the shirt for ventilation at the armpits is important in serving to diminish the absorbent material at these points, and necessarily lessens the secretion of perspiration in the solid form of sweat.

Water-proof garments have been provided with means for ventilation for the escape of heated air and moisture from between them and the wearing-apparel, for allowing a circulation and free draft of air beneath the armpits and other parts of the body upon which the water-proof garment has a close fit over the clothes, the object being to prevent, as far as possible, the uncomfortable heating of the body in the use of water-proof overgarments. For this purpose water-proof garments have been provided with eyelet-holes in those parts which come under the armpits of the wearer, said eyelet-holes opening into a loose lining for the air to pass between the coat and the loose lining and effect a circulation of air. For the same purpose tubular passages with eyelet-openings have been formed in the garment for ventilation and to prevent the sleeves

at the armpits from coming in contact with the body of the water-proof garment, and also at the back to hold the garment away from the coat of the wearer, and to give a circulation of air at those parts of the body most affected from the heat in wearing water-proof garments. My invention is distinguished from these things in this, that it comprehends a shirt having a set-in plaited bosom with provision for permitting the free escape of the perspiration beneath the plaits without a circulation of air beneath the shirt or exposing such ventilating provision, and having that part of the shirt which comes under the armpits made open by one or more rows of eyelet holes or openings, so as to form an open strip or section of the sleeve at the armpits to break or interrupt the continuity of the closed body of the material, and thus reduce the heat and the accumulation and retention of the solid matter which results from sweat, and afford a degree of ventilation at this point.

My invention comprehends a shirt with a set-in bosom having alternate parallel rows of ventilating eyelet-holes and plaited parts lying loosely over and covering the ventilating-rows of eyelet-holes; and my invention comprehends a plaited ventilating-bosom for shirts, the provision for ventilation being covered, and a shirt provided with a set-in plaited ventilating-bosom and set-in sleeves having their armpit parts provided with ventilating set-in strips. It comprehends the combination, in a shirt, of a set-in bosom having plaits and ventilating eyelet-holes covered thereby, and the body having a cut-away part or strip along the arm-hole seam at each arm-pit covered by a ventilating sewed-on strip.

The accompanying drawings represent, in Figure 1, a front view of so much of a shirt as illustrates my improvement. Fig. 2 represents the inner side of a plaited set-in ventilating-bosom. Fig. 3 represents a cross-section of a plaited ventilating-bosom. Fig. 4 shows the armpit part of the shirt-body with the ventilating-strip set in along the armhole-seams; and Fig. 5 shows the inner side of the same, in which is seen the cut-away strip in the body along the armhole-seam covered by the set-in ventilating-strip.

The body of the shirt may be made in the usual or any desired way, and the sleeves and

the bosom set in as usual. The bosom is plaited, and the style of the plaiting may be varied. The bosom may be open in the middle, and the shirt may be open at the back, or otherwise, or the bosom may be closed at the middle, and it may be of any desired form, or cut, and made of a single piece or of separate pieces.

The provision for ventilation at the bosom consists of eyelet-holes *a*, made in those parts of the bosom which lie beneath and between plaits *b*, so as to be covered by them, and this construction will give a bosom-surface of plaits *b*, each plait covering one or more ventilating eyelet-holes, *a*, made in those parts of the bosom over which the plaits lie, so that the eyelet-holes, while being covered and unseen, by reason of being in the non-plaited part, are open to the free or loose plaited parts, which, being unattached at their outer edges, afford a sufficient communication with the interior of the bosom through the eyelet-holes to permit the perspiration to escape out under the bosom folds or plaits, and to give ventilation to such degree as to promote the evaporation of the sweat and the escape of the vapor therefrom from the inside to the outside of the bosom. In the example shown the plaits are made of separate strips or pieces sewed to separate ventilating-strips *c*; but the bosom may be made in a single piece, with the ventilating-holes *a* disposed in parallel rows, so as to permit the forming of the plaiting so that each plait will overlap and cover a ventilating bosom-strip part having free air communication with the inner side of the bosom beneath the free folds which form the plaits. A plaited shirt-bosom so made may be sold as a new article of manufacture, and set in a shirt with or without provision for ventilation at the armpit parts, while a shirt having

provision for ventilation beneath the plaits of a set-in bosom and provision for ventilation at the armpit parts constitutes a new article of manufacture.

The provision for ventilation at the armpit parts consists in cutting out a strip from the body of the shirt along the armhole-seams at the under part, or that part which fits the armpit, and a set-in covering-piece, *f*, having one or more rows of eyelet-holes, *g*. This ventilating strip *f* crosses the side seams of the shirt-body and extends about one-third around the armhole-seam, and I prefer to place it in the body of the shirt; but it may be placed in the sleeve. In either position it is close to the armhole-seam, and may, in fact, be placed within the armhole-seam.

I prefer to make the ventilating-openings of eyelet-holes, but they may be of other form, having their edges bound like button-holes.

The shirt may be made of muslin, flannel, linen, or other suitable fabric.

I claim—

1. As a new article of manufacture, a shirt having a plaited set-in bosom provided with ventilating-openings covered by said plaits, substantially as herein set forth.

2. As a new article of manufacture, a shirt having a plaited set-in bosom provided with ventilating-openings covered by said plaits and ventilating-openings around the under part of the armhole-seams, substantially as herein set forth.

3. As a new article of manufacture, a shirt-bosom having plaits and ventilating-openings covered by said plaits, substantially as herein set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

AUGUSTUS H. BRINKMANN.

Witnesses:

WILLIAM A. WILSON,
HENRY F. YOUNG.