## UNITED STATES PATENT OFFICE.

WALTER HUNT, OF NEW YORK, N. Y.

## IMPROVEMENT IN SHIRT-COLLARS.

Specification forming part of Letters Patent No. 11,376, dated July 25, 1854.

To all whom it may concern:

Be it known that I, WALTER HUNT, of the city, county, and State of New York, have invented a new and useful Method of Making the Collars and Bosoms of Shirts, of which the following is a full, clear, and accurate description.

Attempts have been made at various times to manufacture shirt collars of paper, but they have never been extensively introduced; nor has anything beneficial or lasting resulted therefrom, on account of the fragile nature of the material, which rendered it liable to be easily broken and defaced, while it was liable to be quickly soiled and to be entirely destroyed if exposed to either rain or perspiration.

The object of my present invention is to produce a shirt-collar that shall not be easily broken, while it shall have sufficient elasticity to bend to the motions of the head, that shall possess the beauty and whiteness of the most carefully-dressed linen collar, and at the same time shall preserve itself unsoiled for a much greater length of time, and shall cost originally less than the washing and dressing of a linen collar; and my invention consists in making the collars of a fabric composed of both paper and cloth, and in subsequently polishing the same by enameling or burnishing, or in any suitable and efficient manner.

My invention further consists in covering the collars made of the above material with a thin pellicle of transparent colorless varnish, whereby they are rendered proof against injury from either rain or perspiration, and when soiled may be wiped off with a damp cloth or sponge and restored to nearly their original whiteness.

To enable others skilled in the art to which this most nearly pertains to make use of my invention, I will proceed to describe the method which I have adopted of carrying it out.

Thin white cotton muslin is coated upon both sides with a very thin white paper, a layer of paste, glue, or other suitable sizing being interposed between them. For the purpose of rendering the material more tough and pliable and less easily broken when bent, I mix with the sizing with which the cloth and

paper are united a portion of saccharine matter, varying in quantity according to the circumstances. The fabric thus produced is then polished by passing it through calenderingrollers, by an agate burnisher, by covering the fabric with a coating of enamel, or by other suitable means. The collars are then stamped or cut out, and may be made either in one piece or in two pieces, the separate portions being afterward glued or pasted together, and if found desirable the collars may be pressed between heated forms to give them the exact shape of the neck. The collar thus formed is then provided with the requisite button-holes or other means for securing it to the shirt, and is ready for the last process, which consists in covering the cotton with a thin coating of transparent, colorless, water-proof varnish for the purpose of protecting it from the effects of moisture, and also of preserving it for a much longer time from being soiled. The varnish which I prefer for this purpose is composed of bleached shellac, as it is transparent, colorless, and resists humidity much longer than any other which I have tried. This varnish may be applied to the fabric either in the sheet or after the collar is made, as may be found preferable.

I will enumerate some of the advantages which a collar prepared as above possesses. Its smooth surface renders it exceedingly pleasant to the face; second, it may be worn many times longer than an ordinary laundry. dressed linen collar without being soiled, and when it is so soiled it may be wiped over with a moist sponge or cloth and be made almost as white as when first made; third, it is not injured by exposure either to rain or to perspiration, as is a starched linen collar, and may even be immersed for a considerable time in water without being materially affected thereby; fourth, it may be made and sold at a price that will not equal the cost of washing and dressing an-ordinary linen collar.

I have heretofore spoken of my invention as particularly applicable to shirt-collars; but it is evident that it is equally adapted to shirt-bosoms and wristbands.

I do not claim making collars of paper, neither do I claim the peculiar fabric which I

make use of, nor the enameling and polishing of such fabric, nor do I claim making paper or cloth water-proof by means of varnish; but

What I do claim as my invention, and desire to secure by Letters Patent as a new article of manufacture, is—

The above-described shirt collar, made of

the fabric set forth, and polished and varnished in the manner and for the purpose specified.

WALTER HUNT.

Witnesses:

SAM. COOPER, JNO. MURDOCK.