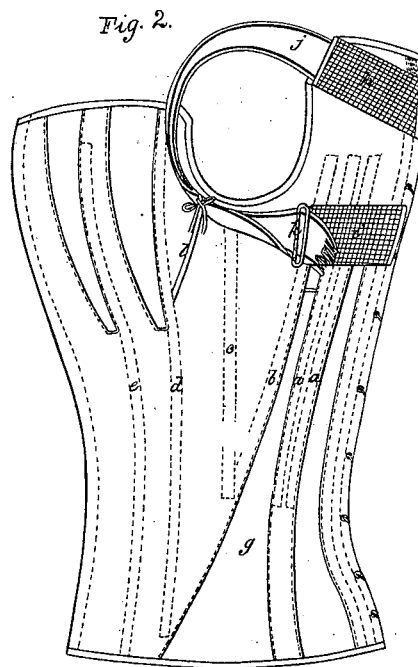
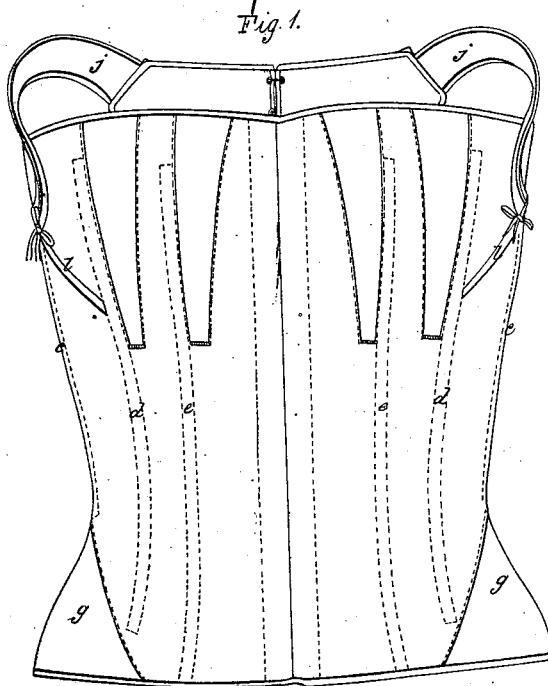
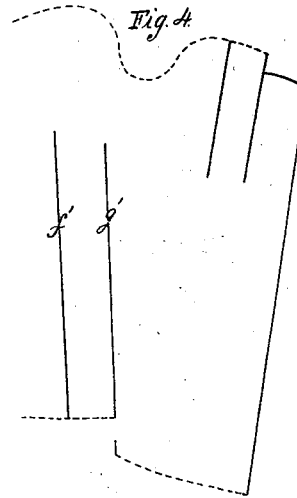
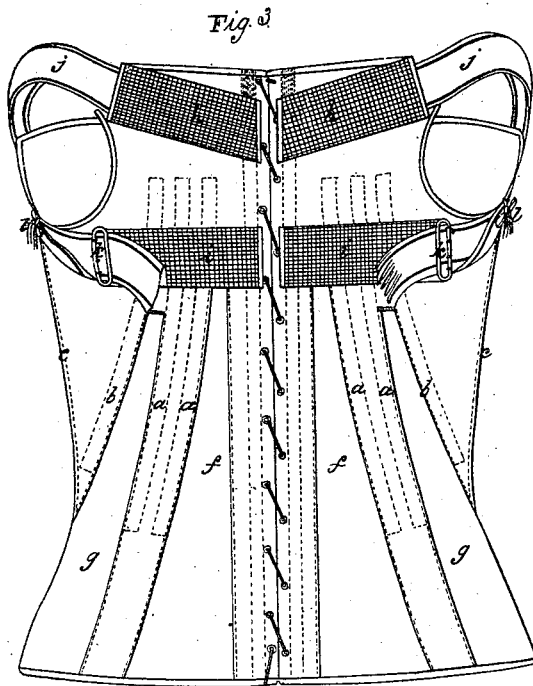


L. BALIS.  
STAY.

No. 7,627.

Patented Sept. 10, 1850.



# UNITED STATES PATENT OFFICE.

LOUISA BALIS, OF ONEIDA COUNTY, NEW YORK.

## LADY'S STAY.

Specification of Letters Patent No. 7,627, dated September 10, 1850.

*To all whom it may concern:*

Be it known that I, LOUISA BALIS, of the county of Oneida and State of New York, have invented certain new and useful Improvements in Ladies' Stays; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front view. Fig. 2 is a side view. Fig. 3 is a back view. Fig. 4, a view of one half of the body of the stay.

The same letters of reference refer to corresponding parts in all the figures.

My invention consists in a proper distribution of the support, likewise protection given to the body by a new arrangement of the position, length and shape of the lower gores; also a new construction of the shoulder strap by means of which the chest can be expanded in a proper and effectual manner.

It is well known that the pressure, and weight, at, and below the short ribs, of garments worn by ladies, always aggravate, and frequently cause those diseases peculiar to their sex. This stay is constructed on such principles, as at once, to expand the chest,—to support the entire waist,—to prevent and always relieve such diseases.

To enable others skilled in the art to make, and use my invention I will proceed to describe its construction and arrangement. The stay is manufactured of the usual material. The whale bones are inserted in the usual manner, and the stay is fastened as usual by lacing.

*a, a, a, a*, are whale bones passing over the hips, and terminating just below the shoulder blades—*b, b*, are whale bones passing over the hips nearer the sides than those described *a, a, a, a*, and terminating just under the shoulder blades close to *a, a, a, a*—the dotted lines represent the stitching by which the whale bones are inclosed. The whale bones *a, a, a, a*, and *b, b*, are for supporting that portion of the back between the hips, and shoulder blades, and protecting the muscles about the loins from the injurious effects of weighty skirts, etc. etc. *c, c*, are whale bones passing up the sides of the stay from the hips nearly to the arm pit. *d, d*, and *e, e*, are whale bones passing up the front of the stay. The stitching by which the whale bones are inclosed is all in

straight lines, which only take the curved forms as represented in the drawings, when the stay is on the person. *f, f*, are two gores of like shape running up the back of the stay, their upper edges terminating at a point a short distance below the shoulder blades. *g, g*, are similar shaped gores commencing at each side over the hips, and running toward the back between the whale bones *a*, and *b*, and terminating nearly at the same height as those *f, f*.

Fig. 4 represents one half of the body of the stay—the perpendicular lines *g'*, and *f'*, indicate where the gores *g'*, and *f'*, should be inserted. They should extend up until within 3 or 4 inches of the armpit, in order to locate the smallest compass of the stay upon the strong ribs.

By the above construction the smallest compass of the stay is made to occur just above the point where the gores *g, g, f, f*, terminate thence causing the greatest tightness or pressure of the stay, when adjusted upon the person, to bear upon the best fortified portion of the waist, viz, the strong ribs just below the arm pits, while the loins or base of the waist is left perfectly free from the pressure of all clothing, even the stay itself. The effect of this arrangement is to prevent a slender or taper waist, by protecting the loins from all kinds of weight and pressure.

It should be borne in mind that herein, is an important point of difference from the common stay. The common stay by an opposite construction caused the greatest tightness or pressure to bear upon the loins, or base of the waist, to the end, that a slender waist may be formed thereby.

The shoulder straps are made of rubber stuff, and linen webbing, the upper ends of which are made fast to the back of the stay near the top; the lower ends are made fast to the back of the stay also, but in such a position as will cause them to cross the lower edges of the shoulder blades when the shoulder straps are adjusted to the arms.

*h, h*, and *i, i*, are four pieces of rubber stuff fastened each, one end, to the back of the stay.

*j, j*, is the linen webbing sewed to the rubber stuff *h, h*, and joined to the rubber stuff *i, i*, by means of the buckles *k, k*.

*l, l*, are strings of tape attached to the stay for the purpose of drawing the shoulder straps down; in front, so as to prevent them

from obstructing the circulation, or irritating the muscles about the arms.

By a proper tension of the shoulder straps, when the stay is adjusted upon the person, the most direct, and effectual expansion may be given to the chest, as well as support to the shoulders, with the least possible obstruction to the circulation, or irritation to the muscles about the arms.

10 What I claim as my invention and desire to secure by Letters Patent, is—

The peculiar arrangement (in the body of the stay) of the whalebones *a, a, a, a,* and *b, b,* in combination with the gores *g, g,*

and *f, f,* of the particular form and in the particular position represented whereby the usual irritating effects of ladies' garments upon the muscles &c. about the loins are avoided at the same time, that effectual support is given to the whole waist, by means of the peculiar position, and shape of the gores, and thence the easy curves given to the whale bones as set forth.

LOUISA BALIS.

Witnesses:

GEORGE GRAHAM,  
G. F. BIRCHARD.