D. HEATON.

Lacing Studs.

No. 137,305. Patented April 1, 1873.

Fig 1.

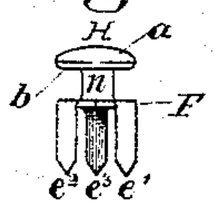


Fig 2.

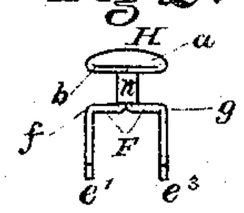


Fig 3.

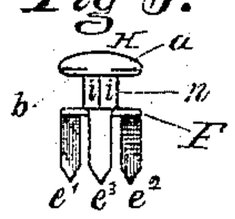


Fig 4.

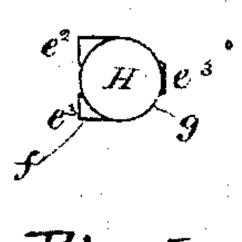


Fig 5.

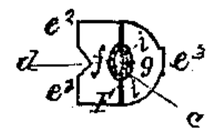


Fig 6.

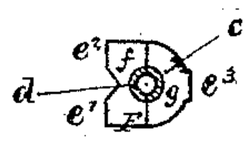
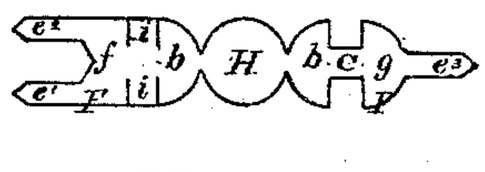


Fig 7.



Witnesses.

Edwin C. Connoy

Isaac A. Burnell

Inventor.

Dan Heaton

UNITED STATES PATENT OFFICE.

DAVID HEATON, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN LACING-STUDS.

Specification forming part of Letters Patent No. **137,305**, dated April 1, 1873; application filed February 7, 1873.

To all whom it may concern:

Be it known that I, DAVID HEATON, of the city and county of Providence and State of Rhode Island, have invented a new and Improved Shoe-Button or Lacing-Stud, of which the following is a specification, referring to the accompanying drawing making part of the same, in which—

Figure 1 is a front elevation, Fig. 2 is a side elevation, and Fig. 3 is a rear elevation, of my improved shoe-button or lacing-stud. Fig. 4 is a plan or top view of the same. Fig. 5 is a plan with the head removed, showing the oval-clasped neck or post. Fig. 6 is a like view, showing a round neck or post without clasping. Fig. 7 is a view of the blank as cut from the sheet metal from which said shoe-button or lacing-stud is made.

Similar letters mark like parts in all the figures.

The invention herein described is an improvement in that described and claimed in Letters Patent number 129,474, dated July 16, 1872, and other Letters Patent granted, like the former, to DAVID HEATON, and numbered 133,223, and dated November 19, 1872.

The improvement in this case consists in making a button or stud with the several characteristic features of those in the Letters Patent mentioned, but with the lacing-neck, shank, or post in the center, or nearly so, of the "button-head," instead of on one side of the head, the same being, like the others, made from a blank cut from sheet metal.

The patents referred to show practically the lacing-button with the lacing stay or neck one side of the button-head; but this drawing and specification shows and describes the lacing-stay in the center of the head, or nearly so, and with the usual table or base-plate F, and the arrangement of the fastening-prongs e^1 e^2 e^3, as in Letters Patent No. 133,223, or otherwise, to set the button or stud in the material where they are to be used.

In the accompanying drawing, H is the head, of two parts or thicknesses of metal, *a* and *b*. *n* is the neck, shank, or post, in two parts or thicknesses of metal, *c* and *d*, and a third thickness formed by two clasping-pieces, *i i*, which embrace and strengthen the other two. The table F is in two parts, from one, *f*, of which the two fastening-prongs e^1 and e^2 extend downward and form the other part, *g*. The third fastening-prong e^3 extends downward and in line with the space between the other two. The two parts of the table admit of the formation of the neck or post *n* in the center of the head H, as will be understood by an examination of the several features of the blank, Fig. 7. The disk *a*, which forms the top part of the head, is nearly in the center of the blank. On each side of said disk there is a half disk, *b b*, which is doubled under to form the under side or lining of the head, and adjoining said half disks are two straight strips, *c d*, which are bent ovaling or round and bent together to form the neck or post *n*, and two wings, *i i*, extending from one of these neck-strips *d*, serve as clasps, and the remaining portions, *f* and *g*, are the two parts of the table, with two fastening-prongs on one and one prong on the other, as before described.

The clasping ends *i i* may be omitted in some cases, as when the post is round, as shown in Fig. 6, when the neck is generally strong enough without it. The same would be the case if the neck was large and oval in shape; but when the neck is nearly flat, as shown in Figs. 1, 2, and 3, it is better that the same be strengthened and supported with the clasps.

The improved shoe-button or lacing-stud above described is intended for use for button-boots in place of those now in use that are sewed on, also for lacing boots, as contemplated in the Letters Patent referred to; but besides these, and more particularly, for buttoning gloves, and for suspender-buttons for pantaloons and similar service, where an upright central post-button or stud is required, and with a permanent fastening that is not dependent on thoroughness of sewing to keep it in place or from coming off the shoe or apparel.

Having described my invention, I claim—

The improved shoe-button or lacing-stud, made from sheet metal, with its neck or shank *n* in the center of the head H, by forming the under part *b* of the head H and the neck *n* and the table F from two similar parts of a blank, bent or clasped together at the center, substantially as shown and described.

DAVID HEATON.

Witnesses:

ISAAC A. BROWNELL,

EDWIN C. POMROY.