

*I. B. Vernalank,*

*Buckle,*

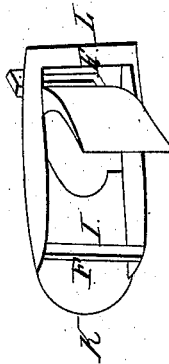
*N<sup>o</sup> 3,471.*

*Patented Mar. 9, 1844.*

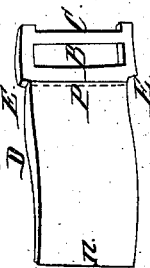
*Fig. 3.*



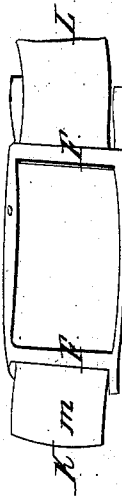
*Fig. 5.*



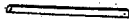
*Fig. 2.*



*Fig. 4.*



*Fig. 1.*



*Witnesses:*

*Bury & Hall  
Saml. H. H. H. H.*

*Inventor:  
I. B. Vernalank*

# UNITED STATES PATENT OFFICE.

ISAAC B. VERPLANK, OF MENTZ, NEW YORK.

## BUCKLE.

Specification of Letters Patent No. 3,471, dated March 9, 1844.

*To all whom it may concern:*

Be it known that I, ISAAC B. VERPLANK, of Mentz, in the county of Cayuga and State of New York, have invented a new and Improved Mode of Constructing Buckles; and I do hereby declare that the following is a full and exact description.

The nature of my invention consists in constructing a buckle in such manner, form and shape that upon the principle of the lever, no hole or puncture of the leather or other material which the buckle is intended to fasten or secure is necessary, or in other words, so constructing a buckle upon the principle of the lever that it will answer all the purposes of the ordinary tongue buckle or wedge buckle without weakening the leather or other material which the buckle is intended to fasten or secure, by any hole or puncture.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation having reference to the accompanying drawings making part of this specification.

Figure 1 is the fulcrum which connects the lever with the other part of the buckle and upon which the lever turns or plays. Fig. 2 represents the lever of the buckle. Fig. 3 represents all parts of the buckle excepting the lever. Fig. 4 represents the entire buckle with a strap fastened in and by it. Fig. 5 represents the entire buckle with the lever in a position to receive the strap or material intended to be fastened.

At the end of the lever Fig. 2 there is an aperture B of a size sufficient to admit the strap or material to be sewed or fastened to that part of the lever represented by C Fig. 2. Through the lever there is a hole D, Fig. 2, of a size sufficient to allow the fulcrum, Fig. 1, to pass into it and turn in it.

Fig. 2, E shows a shoulder such as may be made on each side of the lever each directly opposite the other but which are not necessary to the full action of the buckle and the use thereof.

Figs. 3, 4, and 5, F shows two cross pieces which are firmly fixed to the upper sides G, G, Fig. 3, of that part of the buckle shown by Fig. 3 but which cross pieces do not extend as low as the bottom of said sides and which are necessary to the action of the lever, and to keep the strap or material in-

tended to be inserted in or fastened by the buckle in its place.

Fig. 3, H shows the fulcrum shown by Fig. 1 inserted in that part of the buckle shown by Fig. 3.

Fig. 3, I shows a cross piece on a part of the bottom of the buckle, which cross piece is firmly fixed to the bottom of the sides, Fig. 3, G, but the cross piece I, Fig. 3, is not necessary to the full action and use of the buckle, and the cross piece may extend as far from the end of the buckle shown by K, Fig. 3, as it can, and allow the lever Fig. 2 to be secured to the part of the buckle, Fig. 3, by the fulcrum, Fig. 3 H and as will allow the lever Fig. 2, to turn upon the said fulcrum so as to admit the insertion of the strap or material intended to be secured or fastened under the cross pieces, Fig. 3, F, F. The parts of the buckle, Figs. 2 and 3, are then fastened together by inserting the fulcrum, Fig. 1 and Fig. 3, H through the side pieces, Fig. 3, G of the part of the buckle shown by Fig. 3 and through the hole shown by Fig. 2, D in such manner that the end of the lever shown by Fig. 2, B, C and D shall be under that part of the buckle shown by Fig. 3, F. The ends of the fulcrum, Fig. 3, H are riveted or fastened to the sides, Fig. 3, G.

When the parts above described, are put together as above the buckle is complete. The strap or material intended to be fastened is inserted under the cross piece of the buckle nearest to the end of the buckle shown, Figs. 3 and 4, K, K, and passes over the lever and under the cross piece, Fig. 3, F nearest to the end of the buckle shown by Fig. 3, L. When the strap or material intended to be fastened is inserted in the buckle as shown, Fig. 4, any force applied to the end of the strap, Fig. 4, M forces downward the end of the lever shown by Fig 2, N, and presses upward the opposite end of the lever so as to press the end of the lever last named against the leather or material intended to be fastened or secured and the cross piece, Figs. 3 and 4, F, F, nearest to the end shown, Figs. 3 and 4, L, L, and the greater the force so applied to the strap leather or material intended to be fastened or secured the greater will be the pressure at the part of the buckle under the cross piece shown by Figs. 3 and 4, F, F. The length of the lever, Fig. 2, being greater

from the hole for the insertion of the fulcrum to the end of the lever shown by Fig. 2, N, than from the fulcrum to that part of the lever, Fig. 2, under the cross piece, Figs. 3 and 4, F, F, nearest to the end of the buckle shown by Figs. 3 and 4, L, L, the greater force in securing the strap or other material will be at that point but the strap or other material will be somewhat secured by the pressure of the leather or other material by the end of the lever, Fig. 2, N, against the cross piece, Figs. 3, 4, 5, F, F, F, nearest to Fig. 3, 4, and 5, K, K, K. The cross pieces shown, Fig. 3, 4, and 5, F, F, F, and the fulcrum, Fig. 3, H, and the lever, Fig. 2, prevents the strap or material inserted as is shown in Fig. 4, M, from becoming loose.

The width of the lever, Fig. 2, from the part shown, Fig. 2, E, to that part shown, Fig. 2, N is such as to allow it to be inserted and move upon the fulcrum, Fig. 3,

H. The cross pieces, Figs. 3, 4, and 5, F, F, F, nearest to L, in same figures is over that part of the lever shown by Fig. 2, P. 25

The buckle may in all its parts be made of any metal, and need not consist of more than three pieces to wit, the fulcrum, Fig. 1, the lever, Fig. 2, and that part shown by Fig. 3. 30

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

The combination of the buckle case consisting of the bottom, sides, and cross-pieces, with the lever, containing an aperture at the end, and one near the center, the whole being constructed and operating in the manner, and for the purpose described; or in any other substantially the same. 35

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Witnesses:

J. H. BOSTWICK,  
JOHN P. HULBERT.