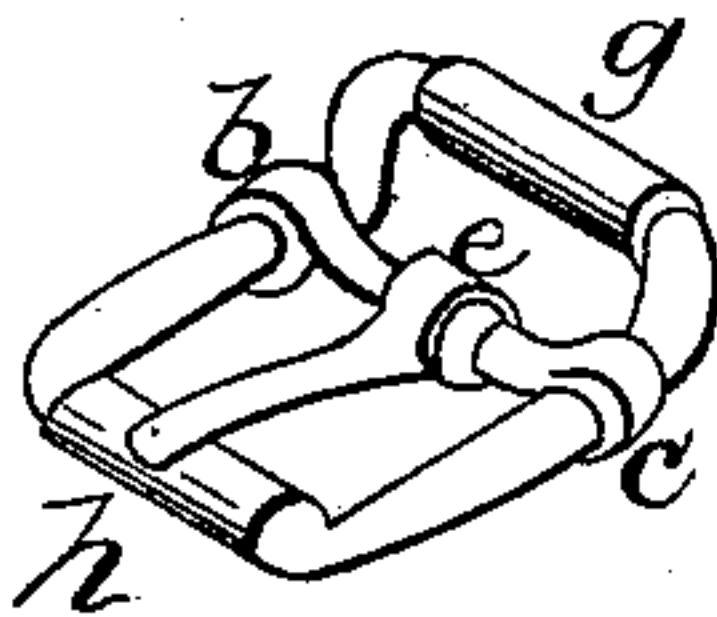
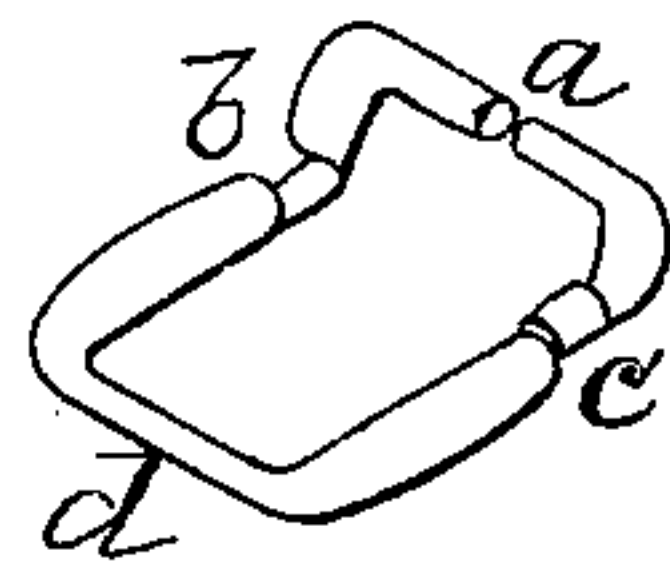


G. R. Kelsey,
Buckle,
No. 43,997, Patented Aug. 30, 1864.

Fig; 1.



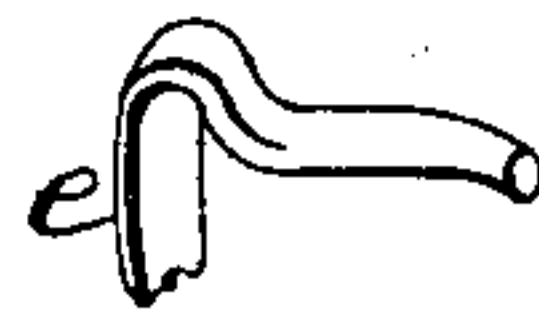
Fig; 2.



Fig; 3.



Fig; 4.



Witnesses;
S. Thompson
R. Fitzgerald.

Inventor;
Geo R Kelsey

UNITED STATES PATENT OFFICE.

GEORGE R. KELSEY, OF WEST HAVEN, CONNECTICUT.

IMPROVEMENT ON BUCKLES.

Specification forming part of Letters Patent No. 43,997, dated August 30, 1864.

To all whom it may concern:

Be it known that I, GEORGE R. KELSEY, of West Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Buckles, as a new article of manufacture; and I do hereby declare that the following is a full, clear, and exact description of the construction, character, and operation of the same, reference being had to the accompanying drawings, which make part of this specification, in which—

Figure 1 is a perspective view of the buckle complete as ready for sale or use. Fig. 2 is a perspective view of the bow and loop or main frame of the buckle, showing the swaged depressions where the cross-bar is attached and the open joint where the two ends of the wire meet. Fig. 3 is a perspective view of the cross-bar as swaged, ready to be attached to the main frame. Fig. 4 is a perspective view of the tongue as swaged, ready to be attached to the cross-bar.

My improvement consists in a buckle made of three pieces of wire, each piece swaged to its proper form, so that when united or attached together one piece will constitute the bow and loop or main frame of the buckle, while the second will form the cross-bar, to which the tongue is attached, and the third will form the tongue, with all which I use two hollow anti-friction rollers, against which the movable part of the strap works when buckling and unbuckling.

I make the bow and loop or main frame of the buckle of one piece of iron, or any other suitable wire, (of a thickness suited to the size of the buckle,) by the use of suitable dies or swages, making it nearly in the form of a square or oblong, and bringing the two ends of the wire nearly together, as at *a*, and properly shaping the places *b* and *c* to receive the ends of the cross-bar, leaving the two parts *a* and *d* to receive the hollow rollers round all, as represented in Fig. 2. I make the cross-bar of a piece of iron wire by flattening and bending the two ends, as represented in Fig. 3. I make the tongue of a piece of iron wire by sharpening one end (to fit it for entering the hole in the strap) and by flatten-

ing and bending the other end, all as represented in Fig. 4. I connect the cross-bar, Fig. 3, with the main frame, Fig. 2, by swaging or setting down the flattened ends, so as to secure the cross-bar firmly and rigidly to the main frame, as represented at *e* and *b*, Fig. 1, and I attach the tongue, Fig. 4, by swaging or setting down the bent end *e* around the cross bar, as represented at *e* in Fig. 1, so as to secure the tongue firmly to, and yet allow it to work freely on, the cross-bar. I make and fit the hollow anti-friction rollers *g* and *h* in the usual way, as represented in Fig. 1, when the buckle is ready for use.

The advantages of my present improvement over my buckle patented February 18, 1862, consist in that I use the whole part of the main frame, as *d*, Fig. 2, for the bow or part on which the end of the tongue rests, thus using the strongest part where there is the greatest strain, and the open part at *a* for the loop or part where there is comparatively no strain. This is the reverse of my former buckle, which has been found to be defective in that particular, and in that, by placing the additional hollow roller, *g*, on the loop, I conceal the opening *a*, render it more convenient for tucking the loose end of the strap under the loop, and also render the buckle more symmetrical by the similar appearance of its parts, the whole making it a much stronger and neater buckle than the former one, while it is applicable to all the purposes for which that was designed, and serves every purpose in a more valuable way.

I disclaim all of the parts and arrangements set forth in my patent of February 18, 1862, as such; but

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

A buckle, when constructed and fitted for use substantially as herein described.

GEO. R. KELSEY.

Witnesses:

R. FITZGERALD,
S. THOMPSON.