F. A. & J. B. RUSS.

BUCKLE FOR RUNNING WEBBING.

APPLICATION FILED FEB. 4, 1908.

905,932. Patented Dec. 8, 1908.

Fig. 1.

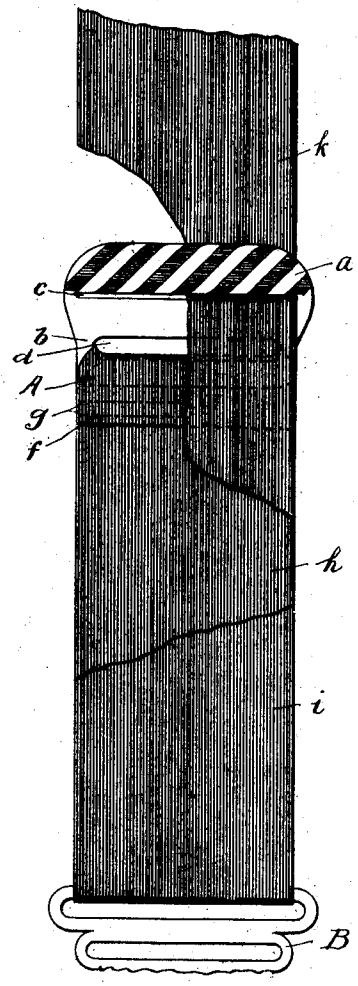



Fig. 2.

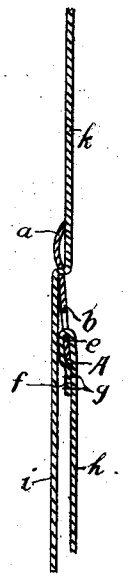



Fig. 4.

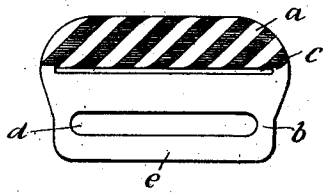
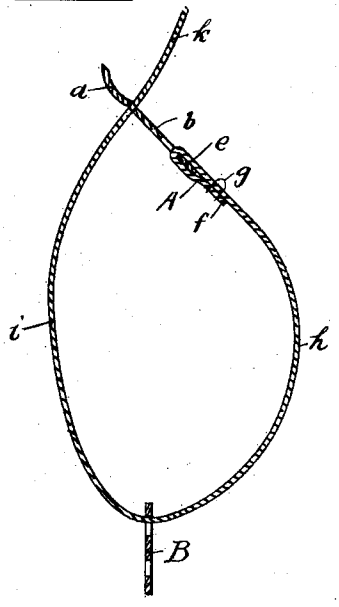



Fig. 3.




Witnesses:
Ada M. Gessner
Robert L. Mengel.

Inventors
Friend A. Russ
John B. Russ
By their Attorneys
Holden & Holden

THE NORRIS PETERS CO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

FRIEND A. RUSS, OF GREENWICH, AND JOHN B. RUSS, OF SHELTON, CONNECTICUT.

## BUCKLE FOR RUNNING WEBBING.

No. 905,932. Specification of Letters Patent. Patented Dec. 8, 1908.

Application filed February 4, 1908. Serial No. 414,275.

*To all whom it may concern:*

Be it known that we, FRIEND A. RUSS, residing at Greenwich, in the county of Fairfield and State of Connecticut, and JOHN B. RUSS, residing at Shelton, in the county of Fairfield and State of Connecticut, both citizens of the United States, have invented a new and useful Improvement in Buckles for Running Webbing, of which the following is a specification.

This invention relates to buckles of the type adapted to carry the extremity of a webbing and to operate along the running portion to form an adjustable loop, and its object is to provide a one piece sheet metal buckle of this character through which the running portion of its attached webbing is passed only once, and which is so strung that when the webbing is put under stress or tension the running portion will be gripped and held in its adjusted position closely engaging the buckle and presenting a thin, compact and neat appearance.

With this and other objects in view our invention consists in the details of construction and manner of operation more fully described in the following description and accompanying drawings in which like reference characters refer to corresponding parts.

In the drawings: Figure 1 is a front view of the buckle showing the attached webbing broken away; Fig. 2 a vertical section of the buckle shown in Fig. 1 the webbing appearing in full lines; Fig. 3 a vertical section of the buckle showing the attached webbing relieved from draft or tension; and Fig. 4, a front view of the buckle before the webbing is attached.

The buckle generally comprises a sheet metal frame having an upper portion *a*, a flat lower portion *b*, and a narrow intermediate and transversely disposed slot *c*. The upper portion *a* has its upper edge bent slightly rearwardly of the plane of the back face of the lower portion for a purpose to be hereinafter described. The lower portion *b* is further slotted, adjacent to its lower extremity at *d* to form a lower supporting bar *e*. One extremity of the webbing is passed through the slot *d* and folded around the supporting bar *e* and sewed upon itself by stitches *g*, *g* thereby forming a terminal supporting loop A. The extremity of the webbing being thus supported by the bar *e*, the running portion passes downwardly into a lower reach *h* then returning upon itself through a suitable connecting piece B passes rearwardly through the slot *c* and then upwardly into an upper reach *k*. The buckle is struck up from a single piece of sheet metal thin and substantially flat so that when the reaches are under draft or tension the buckle will add no considerable thickness to the overlapping webbing.

When the webbing is slack as shown in Fig. 3, the buckle, due to the width of the slot being substantially equal to the thickness of the webbing, has a tendency to set at an angle thereto. In this position the slack running portion may be passed freely through the slot to effect the desired adjustment relative to the buckle. We find that better results are obtained when the slot *c* is made just wide enough to permit the running portion of the webbing to be pulled therethrough with very slight force when the same is slack, for should the slot be wider than this the buckle is liable to slip up and down on the webbing. When the webbing is put under draft or tension, as shown in Figs. 1 and 2, the buckle is drawn into a plane nearly parallel to that of the webbing, which causes the edges of the slot *c* to distort the running portion passing therethrough, thereby firmly gripping and holding the same so that it cannot be moved relatively to the buckle until the tension or draft is relaxed. By making the length of the slot *c* equal to and the slot *d* shorter than the width of the webbing, we are enabled to narrow the width of that portion of the buckle below the slot *c* so that the same will be substantially concealed behind the running portion of the webbing passing over the front thereof leaving only the upper portion *a* and the sides adjacent to the slot *c* exposed to view. Its exposed portion may be swelled outwardly and struck up to present suitable ornamentations and symmetrical lines characteristic to buckles in general. In this type of buckle the upper or top edge has a tendency to stand outwardly from the front of the upper reach when the webbing is under draft or tension leaving a space between the upper portion of the buckle and the webbing. This is especially true when the upper portion is broad, that is of considerable vertical dimension, and produces a defect which not only renders the buckle unsightly but detracts from its snug appearance. This defect is due primarily to the fact that it is practically im-

possible to draw a buckle strung as described into a plane exactly parallel with the webbing since the buckle necessarily has a slight angular set or tilt as shown in Fig. 2. In our device, however, the upper or top edge of the buckle being bent slightly rearwardly closes up on the front of the upper reach and assists in balancing the parts when the webbing is under stress or tension.

By attaching the webbing to the lower extremity of the buckle a shorter length of webbing may be employed than where the same is attached further up on the buckle. This saving of webbing, which perhaps might appear infinitesimal in the case of one buckle, would amount to a considerable number of yards in the case of many buckles and further by attaching the webbing at the lower extremity enables a leverage to be exerted upon the buckle when the webbing is put under draft or tension, thereby tending to draw the same further within the planes of the webbing than in those buckles where the webbing is attached further up.

By attaching and threading the webbing in the manner above described, we are enabled to utilize a buckle of minimum transverse dimensions since the slot *c* may be just long enough to give the required strength to the buckle, and further all attaching lips and off-set members may be eliminated. When the webbing is not under draft or tension, as shown in Fig. 3, the terminal loop A, being short and closed around the supporting bar *e*, has a tendency to keep the lower reach from buckling rearwardly as is the case when the webbing is free to swing clear of the rear side of the buckle from some position below the slot *c*.

It may be noticed that while the buckle constructed and strung as above described does not produce an entirely rustless effect, yet the longitudinal dimension thereof may be so shortened that only a minimum surface of the metal will be exposed on the rear side, and further for a greater portion of its length it comprises only one layer of webbing and one of metal thus giving the same a minimum bulk and a substantially flat, compact and neat appearance.

Having now described our invention what we claim and desire to protect by Letters Patent is:

As an article of manufacture a buckle for running webbing comprising a sheet metal plate having a transversely disposed slot therein provided with web gripping edges, and a wider and shorter slot disposed below the first mentioned slot for the passage of the end of such webbing, the said plate having that portion below the first mentioned slot made flat and the portion above said slot bent so that its top edge will lie rearwardly of the plane of said lower portion.

In testimony whereof we have hereunto set our hands this 17th day of January, A. D. 1908.

FRIEND A. RUSS.
JOHN B. RUSS.

Witnesses:
BYRON W. WHEELER,
STEPHEN J. LEONARD.