(No Model.)

R. KELSO.

BINDING FOR FLAGS, &c.

No. 421,724. Patented Feb. 18, 1890.

FIG. 2.

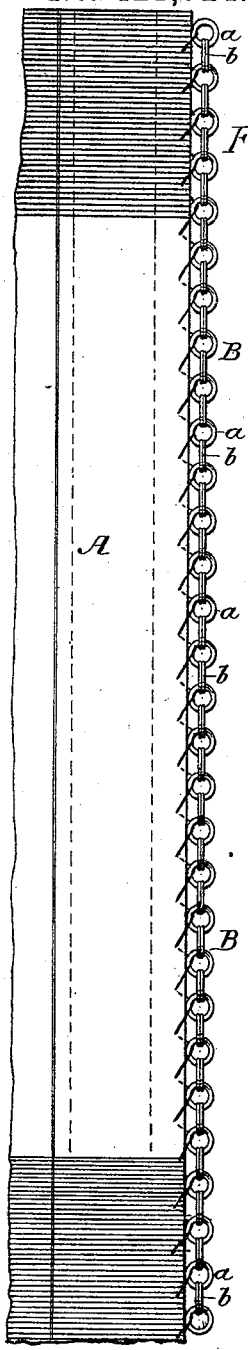


FIG. 1.

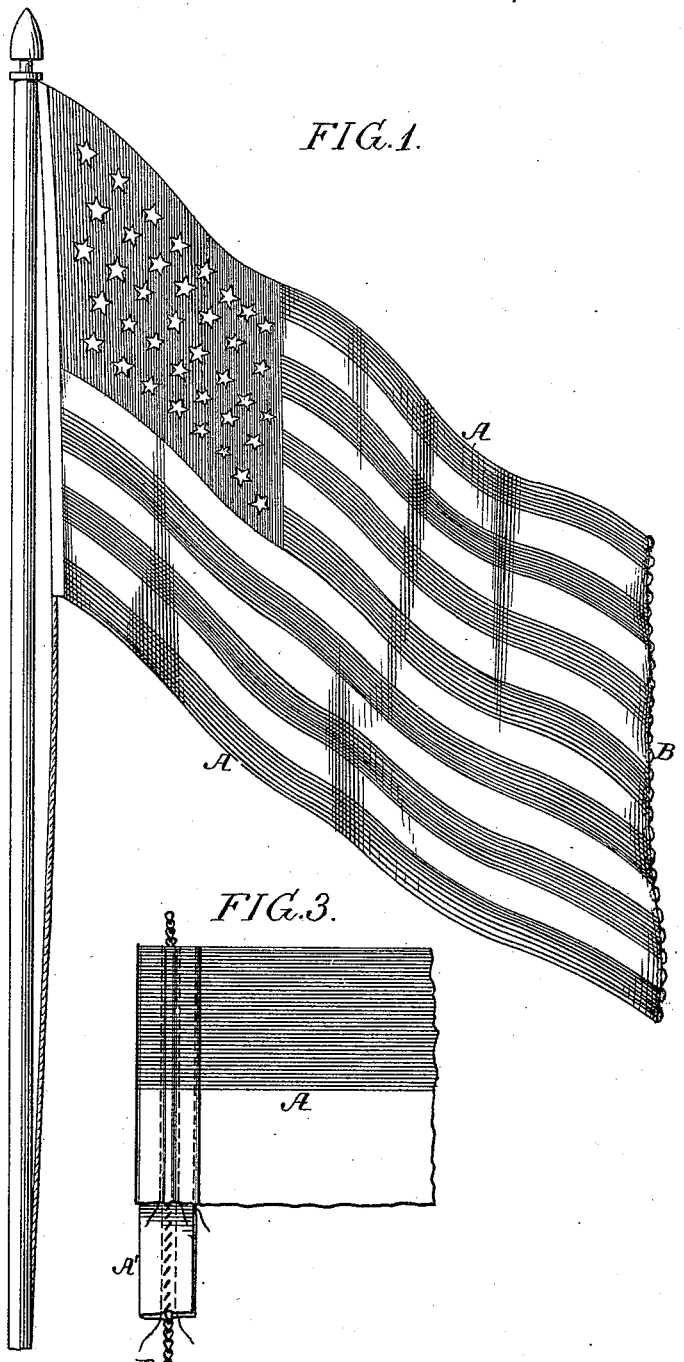
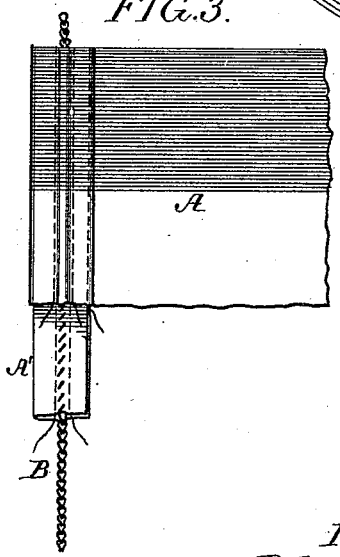


FIG. 3.



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UNITED STATES PATENT OFFICE.

ROBERT KELSO, OF PHILADELPHIA, PENNSYLVANIA.

BINDING FOR FLAGS, &c.

SPECIFICATION forming part of Letters Patent No. 421,724, dated February 18, 1890.

Application filed May 6, 1889. Serial No. 309,774. (No specimens.)

To all whom it may concern:

Be it known that I, ROBERT KELSO, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Bindings for Flags, Banners, &c., of which the following is a specification.

The object of my invention is to prevent flags, banners, sails, and like articles from raveling or shredding when subjected to the action of the wind; and this object I attain in the following manner, reference being had to the accompanying drawings, in which—

Figure 1 is a view of a flag finished in accordance with my invention. Fig. 2 is an enlarged view of a portion of the flag with my improved binding; and Fig. 3 is an enlarged view of a portion of a flag, showing my binding in a different form.

It is well known that flags merely hemmed on the edge soon become frayed out and torn by the action of the wind, and in a short time become unsightly. It has been customary to bind the edges of the flag with heavy canvas or like material to prevent this fraying; but binding of this character is so stiff that it prevents the graceful waving of the flag, thus detracting considerably from the beauty of the flag and condemning it as a marketable article. Ropes and cords have also been used as bindings; but these are open to the same objection, and, furthermore, are liable when wet, to shrink and distort the flag. I overcome the difficulty by binding to the outer end of the flag A and to the top and bottom of the same also, if desired, a light chain B, having a series of links *a b*, the links *a* being secured to the flag by stitches or other suitable fastening, so that the links *b* are free, as shown in Fig. 2. The links of the chain can be made of metal, or of animal or vegetable fiber, as circumstances suggest, and can be made very light and strong; and I have found by experiment that a light metallic chain can be used for this purpose without detracting from the graceful waving of the flag, as such a chain possesses perfect flexibility and allows the flag to be folded or crumpled as freely as though it were unbound.

My invention is especially adapted to flags in constant service—as, for instance, those used on ship-board or at army or naval stations, where the flag is kept flying in all kinds of weather.

It will be understood that my invention is applicable to banners, pennants, and sails, as well as to flags, and in the case of a sail it is decidedly preferable to the ropes now used, as it will not shrink when wet and draw or pucker the sail.

In some instances where flags are subjected to severe usage, I not only bind the flag with chain, but also strengthen the flag at one or more points by transverse chains D, extending, preferably, from top to bottom of the flag, thereby preventing the flag from screeding or splitting.

The chain in some instances, instead of being attached to the extreme end of the flag, as in Fig. 2, may be bound in the flag, as in Fig. 3, in which instance I prefer to incase the chain in a piece of fabric A′, and then hem the edge of the flag, as shown in said figure, so that the chain will not be exposed. The chain may, however, be inserted in the hem without the strip A′; but I prefer, especially in large flags, to use this extra strip.

I claim as my invention—

1. A flag or sail having one or more of its edges bound with chain, substantially as set forth.

2. A flag having one or more of its edges bound with chain, having links *a a*, alternate links being bound to the flag, substantially as set forth.

3. A flag having one or more transverse chains bound to its face, substantially as and for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ROBERT KELSO.

Witnesses:
HENRY HOWSON,
HARRY SMITH.