July 12, 1927. 1,635,230

C. R. SPICER

SPLINT

Filed Jan. 9, 1926

Fig. 1.

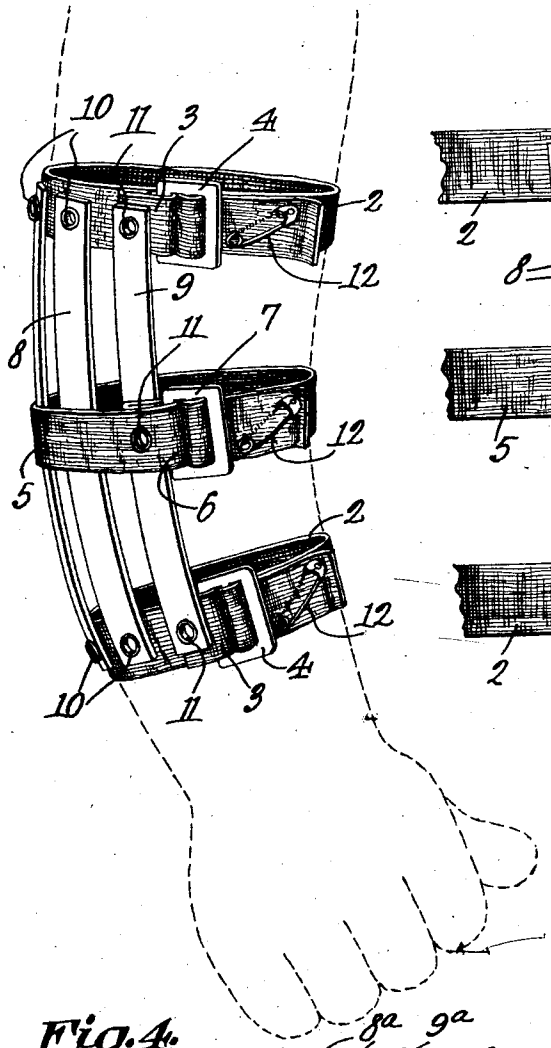


Fig. 2.

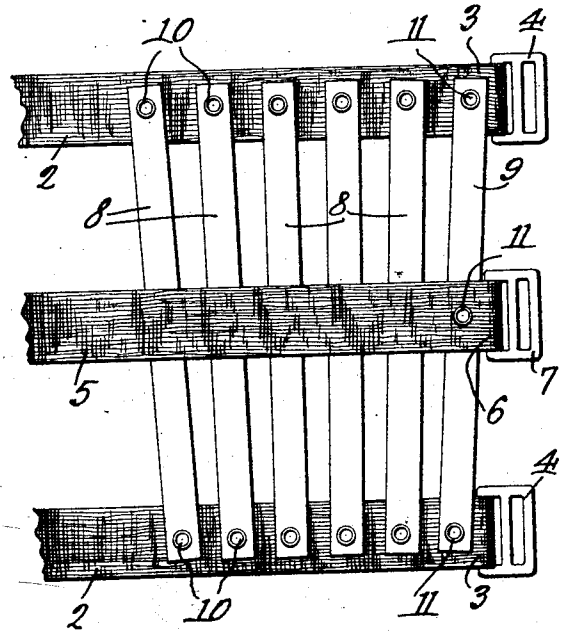


Fig. 3.

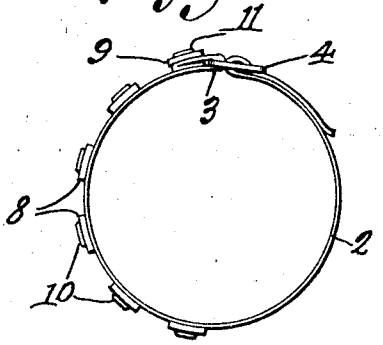
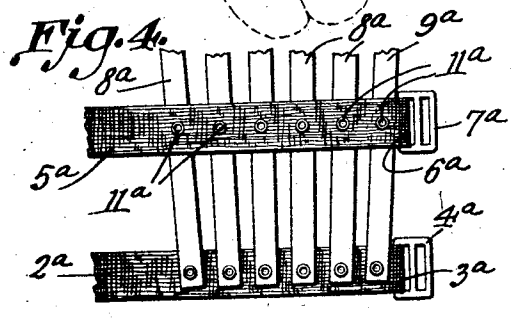


Fig. 4.



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UNITED STATES PATENT OFFICE.

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SPLINT.

Application filed January 9, 1926. Serial No. 80,262.

This invention aims to provide a splint, adapted to be applied primarily but not exclusively, to the arm of an infant, at the elbow, for the purpose of preventing the infant from flexing its arm into such a position that the thumb can be sucked.

The invention aims to provide a splint of the kind mentioned which may be applied readily and be attached with equal facility, by an adult, it being practically impossible, however, for the infant to detach the splint from the arm.

Another object of the invention is so to construct the article that it will cause the wearer a minimum amount of discomfort, and still accomplish the purpose for which it is intended.

It is within the province of the disclosure to improve generally and to enhance the utility of devices of that type to which the invention appertains.

With the above and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

In the drawings:—

Figure 1 shows in perspective, a device of the class described, applied to an arm;

Figure 2 is a plan wherein parts are broken away;

Figure 3 is an end elevation;

Figure 4 is a plan showing a modification, parts being broken away.

The device forming the subject matter of this application embodies end bands 2 which, preferably, are made of flexible inelastic material. At one end, each band 2 is formed into a loop 3. The loops 3 retain buckles 4 of any desired kind, friction buckles being preferred, although this form of buckle is not insisted upon.

The article includes an intermediate band 5 which, preferably is made of flexible inelastic material. The band is formed at one end into a loop 6. The loop 6 retains a buckle 7. The buckle 7 may be of any desired sort, but a friction buckle is preferred, as hereinbefore explained.

The splint comprises a body including any desired number of braces 8 and 9, one of the terminal braces being marked by the numeral 9 because it has functions which are not to be attributed to the braces 8. The braces 8 and 9 may be made of any desired flexible material, such as celluloid, spring metal and the like, the braces 8 and 9 falling short of absolute rigidity. At the same time, they are not flexible enough, so that the infant can bend its elbow and bring its thumb up to the mouth, when the article is applied. The braces 8 are connected to the end bands 2 in any suitable way, for instance by means of securing elements 10, such as hollow rivets. In a similar way, the brace 9 is connected by securing elements 11 to the end bands 2 and to the intermediate bands 5. The securing elements 11 hold the loops 3 of the bands 2 closed, and the securing element 11 of the intermediate band 5 holds the loop 6 of that band closed. The intermediate band 5, it is to be observed, is not connected to the braces 8, but is connected only to the brace 9. The ends of all of the braces 8 and 9 are set inwardly from the outer lateral edges of the bands 2 far enough so that the ends of the braces cannot rub upon the flesh of the wearer.

In practical operation, the article is placed about the arm, as shown in Figure 1. The ends of the bands 2 are assembled with the buckles 4, and the end of the intermediate band 5 is assembled with the buckle 7. As a means of promoting further security, the free ends of all of the bands may be connected to the body portions of the said bands by safety pins 12.

Although the device, when applied, will prevent the infant from bending its arm sufficiently to bring its thumb into its mouth, absolute rigidity is not secured at the elbow joint, since the braces 8 and 9 can bend a little. As a result, a minimum amount of discomfort on the part of the wearer is produced. The utility of the device is enhanced, further, by means of the fact that the intermediate band 5 is connected to the brace 9, only, that band being free from the braces 8.

In Figure 4, parts hereinbefore described have been designated by numerals previously used, with the suffix "a", the modification consisting in securing the intermediate band 5^a to all of the braces 8^a of the body as at 11^a. The form shown in Figure 2, wherein

the band 5 is connected at 11 to one of the braces 8 only, has the advantage of being adapted readily to the arm of the infant, but the form shown in Figure 4 may appeal to those who contend that the form shown in Figure 4 gives greater security at the elbow and prevents the elbow from spreading the braces.

What is claimed is:

1. An article of the class described, comprising transversely spaced end bands and an intermediate band, means for connecting the ends of each band detachably together, and a body made up of transversely spaced braces the ends of which are set inwardly from the outer lateral edges of the end bands, whereby the end bands will guard the extremities of the braces, means for connecting the ends of all of the braces to the end bands, and means for connecting the intermediate band to the above-defined body, the intermediate band extending across all of the braces.

2. An article of the class described, comprising transversely spaced end bands and an intermediate band, means for connecting the ends of each band detachably together, and a body made up of transversely spaced braces, means for connecting the ends of all of the braces to the end bands, and means for connecting the intermediate band to the above-defined body, the last-specified means joining the intermediate band to one of the terminal braces, the intermediate band extending freely and movably across the remaining braces.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

CHARLES R. SPICER.