

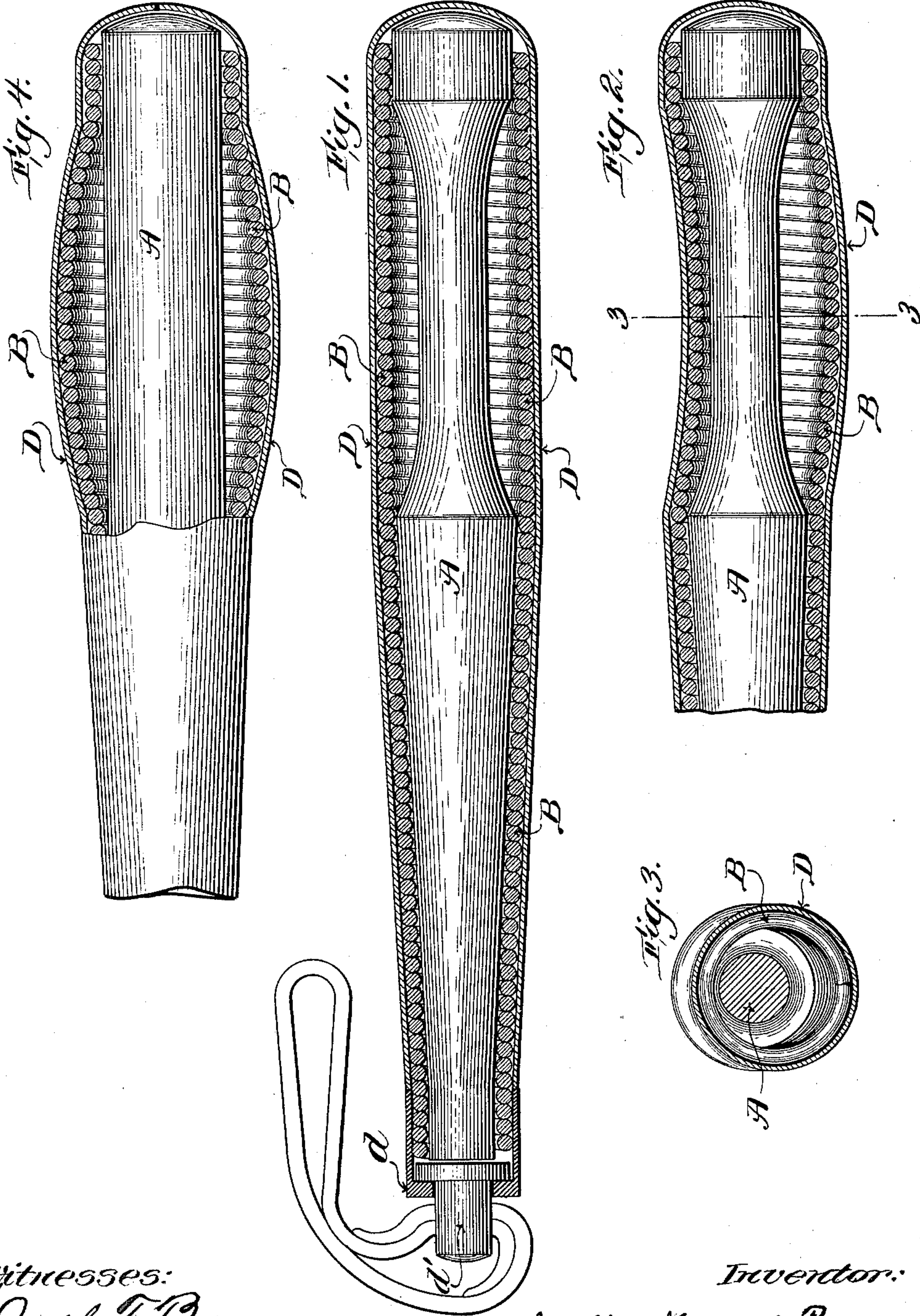
No. 619,268.

Patented Feb. 14, 1899.

W. N. BEAN.
BATON FOR POLICE.

(Application filed Aug. 22, 1898.)

(No Model.)



Witnesses:
Joseph T. Brennan
William A. Mercer.

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UNITED STATES PATENT OFFICE.

WALTER NORWOOD BEAN, OF ARLINGTON, MASSACHUSETTS, ASSIGNOR TO
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BATON FOR POLICE.

SPECIFICATION forming part of Letters Patent No. 619,268, dated February 14, 1899.

Application filed August 22, 1898. Serial No. 689,231. (No model.)

To all whom it may concern:

Be it known that I, WALTER NORWOOD BEAN, of Arlington, Middlesex county, Massachusetts, have invented an Improved Baton for Police Purposes, of which the following is a specification, reference being made to the accompanying drawings, in which—

Figure 1 is a central longitudinal section of my improved baton. Fig. 2 is a central longitudinal section of one end of a baton, showing the deflexion of the spiral in use. Fig. 3 is a cross-section on line 3 3 of Fig. 2. Fig. 4 is a central longitudinal section of one end of a baton, showing a modification of my invention.

The object of my invention is to provide a baton sufficiently stiff and firm to deliver a severe blow in case of need, but so constructed that fractures will not result.

In batons as previously made, the baton being circular in cross-section, the entire force of a blow against any comparatively hard and unyielding substance was exerted upon a line along the surface of the baton parallel with its axis. It is often necessary in order to subdue a refractory prisoner to strike blows upon the head of the prisoner with a considerable degree of force, and it has been found that with the ordinary baton made of wood or leather disks or other comparatively unyielding material a blow sufficiently hard to subdue the prisoner often resulted in a fracture of the skull, owing to the very limited area of the point of impact and the unyielding nature of the instrument. It has been attempted to meet the difficulty by padding the baton; but one result has been that with padding lighter blows, such as are ordinarily sufficient, were rendered ineffective.

My improved baton meets both difficulties, for while under a sufficiently-strong impulse the surface will yield it is for ordinary purposes as hard and unyielding as an ordinary wooden baton.

In the drawings, A is a core of wood or other suitable material of suitable size and shape according to the size and shape desired for the finished article. In the drawings the handle end is shown as tapered. At the striking

end a depression is formed around the wooden core, leaving the extreme end of full size. Around the wooden core is placed a coiled wire B, one end of the wire being secured at the handle end of the wooden core and the other end of the wire at the other end of the wooden core. The coiled wire is so wound that the tapered end of the wooden core will fit snugly within it, while that portion of the wooden core which is of uniform diameter will fill snugly the opposite end of the coiled wire, except at the point where the wooden core is cut away to form the depression.

The wire B may be coiled so that each spiral will be in contact with the spirals upon either side of it or more openly coiled, and the size of the wire may be varied, according to the weight it is desired to give the finished baton, and such modifications may be made without departing from the spirit of my invention, although I have shown the coils of the wire in the drawings as close together, which I believe to be the best construction.

The wooden core having been secured within the coiled wire, a covering of leather or other material of a flexible character is placed over the coiled wire and cemented or sewed and at the handle end a ferrule secured in place to carry the ordinary swivel strap-holder. This leather covering is marked D, the ferrule d , and the swivel d' . It will now be clear that the completed baton is made up of a wooden core, surrounded by a coil of wire, the whole covered with a casing of leather or other suitable material. It will also be clear that the wire coils which lie over the depression formed in the wooden core are in no wise supported, except by their own stiffness, against strains crosswise of the axis of the coil. The result is that when a blow is struck with the baton, using that part of the baton over the depression for the purpose and using sufficient force, the coils will yield crosswise of the length of the baton, increasing the area of impact and distributing the force of the blow over a larger area and through a longer space of time, thus tending to prevent fractures, the yielding of the coils serving as an automatic regulator of the force of the blow.

When a light blow is struck, the inherent stiffness of the coils will withstand the force and the coils will be practically undisturbed.

Figs. 2 and 3 of the drawings show the deflexion of the coils under the force of a blow.

In Fig. 4 is shown a modification of my invention in which room for the play of the spirals crosswise of the axis of the baton is obtained by increasing the diameter of the spirals for a portion of the length of the core as distinguished from decreasing the diameter of the core to attain the same end. The principle and mode of operation are the same.

What I claim is—

1. The baton above described, made up of a core and a wire spirally arranged about the core and supported by the core, at both ends of the core, against lateral displacement of the spirals and unsupported by the core for a portion of the length of the core between the

ends, against lateral displacement of the spirals, substantially as described.

2. The baton above described, made up of a core recessed near one end, a wire spirally arranged about the core and supported by the core against lateral displacement of the spirals, except at the recessed portion, substantially as described.

3. The baton above described, made up of a core; a wire spirally arranged about that core and supported by that core against lateral displacement of the spirals except for a portion of the length of the core where the wire spirals are increased to a size in excess of that of the core, substantially as described.

WALTER NORWOOD BEAN.

Witnesses:

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