

No. 863,836.

PATENTED AUG. 20, 1907.

S. B. W. COVELL.
EXPANSIBLE CHAIN.
APPLICATION FILED APR. 13, 1907.

Fig. 1.

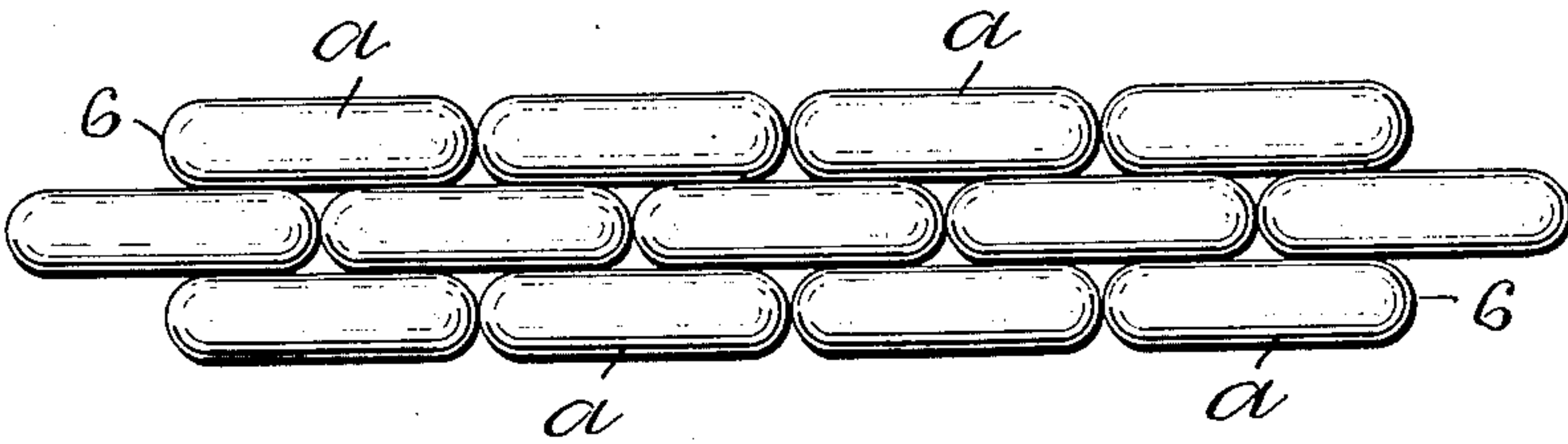


Fig. 2.

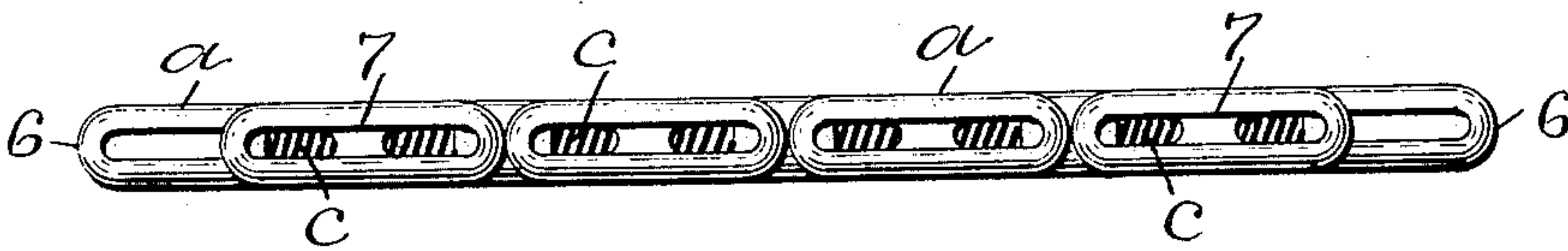


Fig. 3.

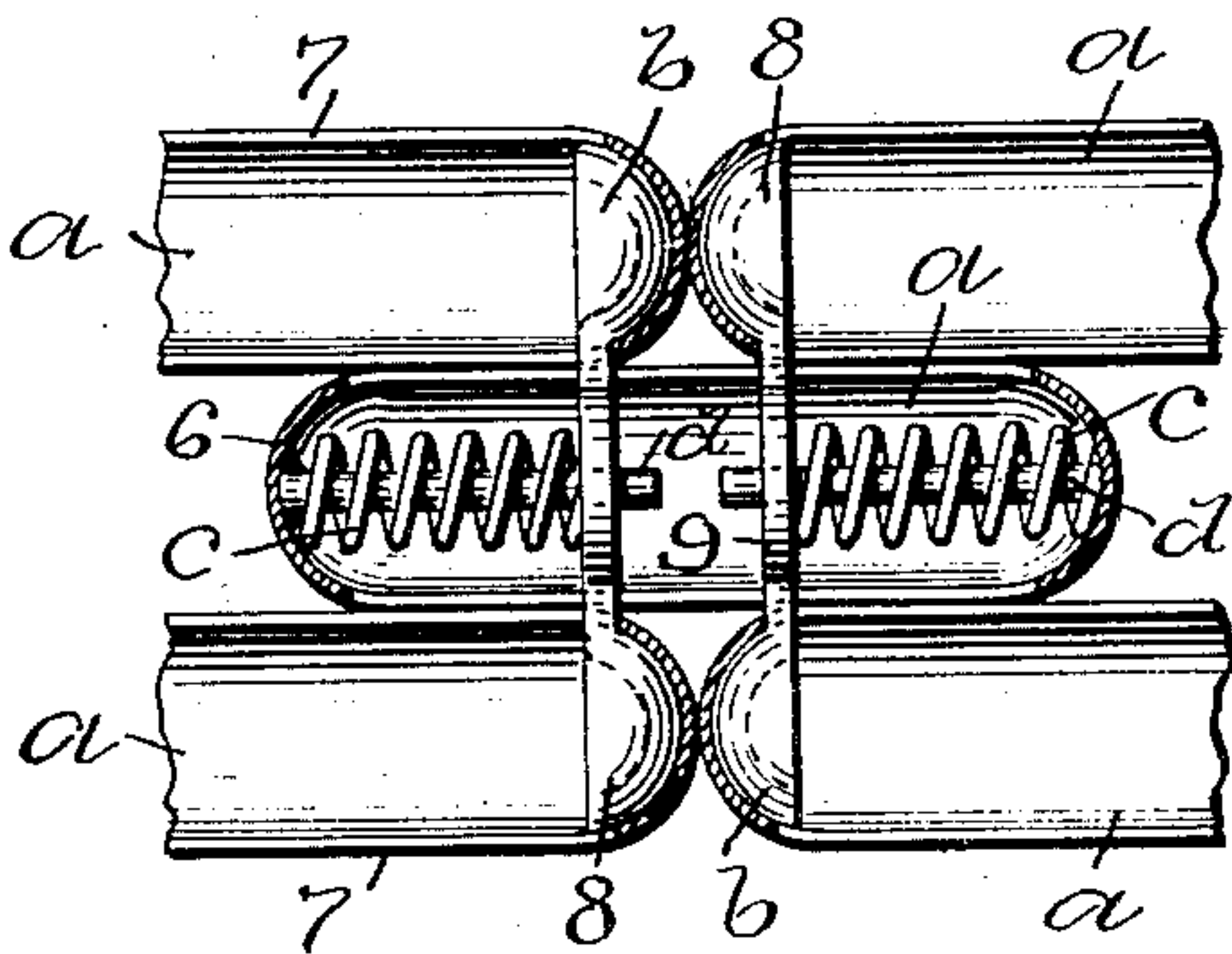


Fig. 4.

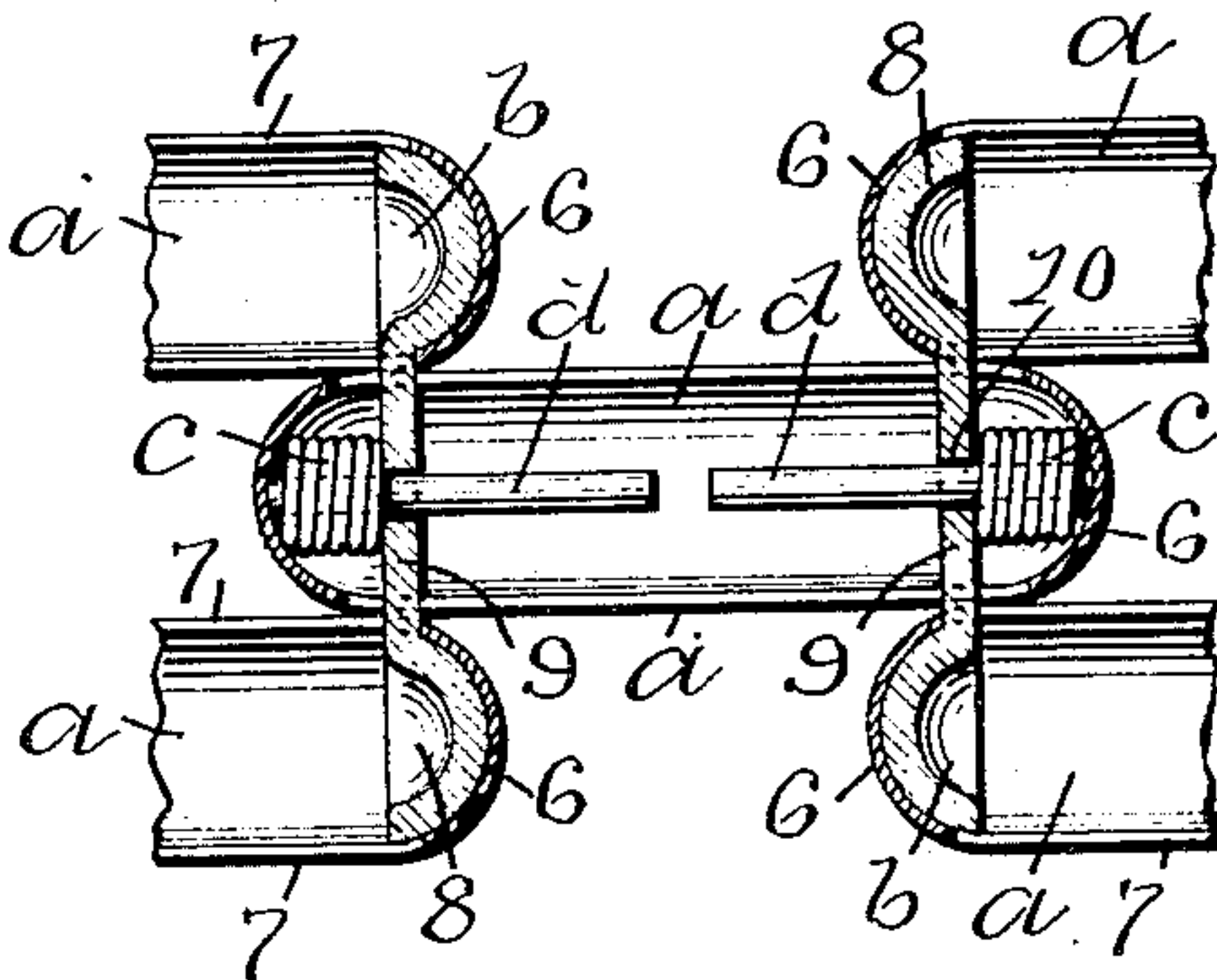
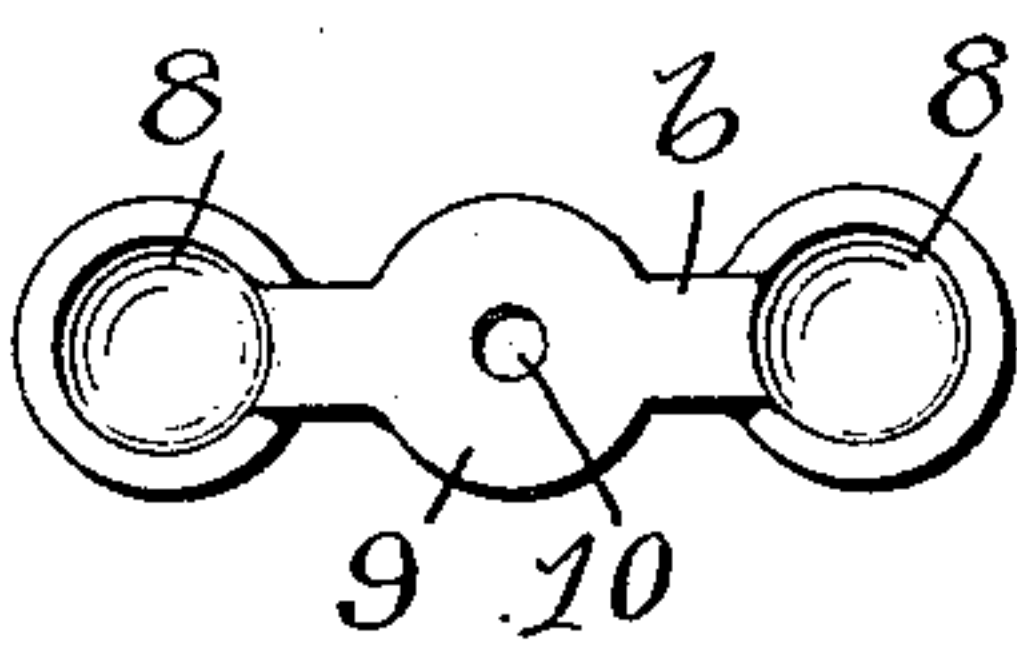


Fig. 5.



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EXPANSIBLE CHAIN.

No. 863,836.

Specification of Letters Patent.

Patented Aug. 20, 1907.

Application filed April 13, 1907. Serial No. 368,110.

To all whom it may concern:

Be it known that I, SAMUEL B. W. COVELL, a citizen of the United States, residing at Pawtucket, in the county of Providence and State of Rhode Island, have
5 invented a new and useful Improvement in Expansible Chains, of which the following is a specification.

This invention has reference to an improvement in chain stock and more particularly to an improvement in jewelers' chain stock used in the manufacture of
10 bracelets, armlets, necklaces or similar articles.

The object of my invention is to improve the construction of expansible chain stock for bracelets or similar articles whereby the chain stock is formed of a plurality of spring-actuated units the construction of
15 which is simplified, the cost of manufacturing the same reduced, and a large expansible action of the stock is attained.

My invention consists in the peculiar and novel construction of expansible chain stock for bracelets or
20 similar articles, said chain stock having details of construction, as will be more fully set forth hereinafter and claimed.

Figure 1 is a face view of my improved expansible chain stock, showing the same in the contracted position. Fig. 2 is an edge view of the chain stock in the contracted position. Fig. 3 is an enlarged detail sectional view of a unit, showing the same in the normal or contracted position. Fig. 4 is an enlarged detail sectional view similar to Fig. 3, showing the unit in the
30 expanded or open position, and Fig. 5 is an enlarged detail face view of one of the connecting bars removed from a unit.

In the drawings, *a a* indicate the shells, *b b* the connecting bars, *c c* the coiled springs and *d d* the spring supporting pins of my improved expansible chain stock. The shells *a a* are preferably plated on the outside with some precious metal and are each constructed in the form of a cylinder having the semi-spherical closed ends 6 6 and the oppositely-disposed longitudinal slots 7 7 in their sides, as shown in Figs. 2 and 3. The connecting bar *b* is stamped from comparatively heavy sheet metal by dies adapted to form the circular cupped ends 8 8 which fit in the semi-spherical ends of the outer shells and the circular central portion 9 with
45 the center hole 10 for a pin *d*, as shown in Fig. 5. The connecting bar *b* extends through the slots 7 7 in the adjacent sides of the shells *a a*, and the central portion 9 of the bar has a sliding fit in the central shells *a a*, as shown in Figs. 3 and 4. The coiled springs *c c* are
50 placed in the central shells *a a* on the pins *d d* intermediate the semi-spherical ends 6 6 of the shells and the circular central portions of the connecting bars *b b*, as shown in Fig. 3. The pins *d d* are secured at one end in the shells *a a* to the semi-spherical ends of the shells
55 by solder or other means in a position to extend through

the center holes 10 10 in the connecting bars *b b*, as shown in Fig. 4, sufficient space being left between the adjacent ends of the pins for the insertion of the connecting bars.

In forming a bracelet from my improved expansible
60 chain stock a sufficient length of the stock is formed in the flat and the ends brought together, forming a circle. The two outside shells of one end are now bent at right angles, the ends 8 8 of the connecting link *b* inserted through the side slots 7 7 in the shells and the shells
65 brought back to their original position. The bracelet is now completed and may be expanded against the tension of the springs *c c* by pulling the units apart, as shown in Fig. 4, and on releasing the same the bracelet contracts to its normal position by the tension of the
70 springs, as shown in Fig. 3.

It is evident that the connecting bar *b* could be constructed to connect any number of the shells *a a* desired, thereby increasing the width of the stock without materially affecting the spirit of my invention. 75

Having thus described my invention, I claim as new and desire to secure by Letters Patent;—

1. In an expansible chain stock for bracelets or similar articles, a series of alternating units consisting of outer and intermediate shells having closed ends and oppositely-disposed longitudinal slots in their sides, connecting bars adapted to extend transversely through the slots in the shells and having a sliding fit in the intermediate shells, means on the connecting bars for securing the ends of the bars in the ends of the outer shells, and coiled
80 springs intermediate the connecting bars and the closed ends of the intermediate shells.

2. In an expansible chain stock for bracelets, or similar articles, a series of alternating units consisting of outer and intermediate shells having closed ends and oppositely-disposed longitudinal slots in their sides, connecting bars having ends shaped to fit in the closed ends of the outer shells, a central portion adapted to have a sliding fit in the intermediate shells and intermediate portions adapted to extend transversely through the slots in the shells, pins secured to the closed ends of the intermediate shells and extending through holes in the connecting bars, and coiled springs on the pins intermediate the connecting bars and the closed ends of the intermediate shells. 90

3. In an expansible chain stock for bracelets or similar articles, a series of alternating units consisting of outer and intermediate shells having semi-spherical closed ends and oppositely-disposed longitudinal slots in their sides, connecting bars having semi-spherical ends adapted to fit in the semi-spherical closed ends of the outer shells, a circular central portion adapted to have a sliding fit in the intermediate shells and intermediate portions adapted to extend transversely through the slots in the shells, pins secured at one end to the closed ends of the intermediate shells and extending through holes in the connecting bars, and coiled springs on the pins intermediate the connecting bars and the closed ends of the intermediate shells. 105

4. In an expansible chain stock for bracelets or similar articles, a cylindrical shell *a* having the semi-spherical closed ends 6 6, the oppositely-disposed longitudinal slots 7 7 in the sides, the pins *d d* secured at one end in the shell to the ends 6 6 of the shell, and the coiled springs
110 *c c* on the pins *d d*, as described.

5. In an expansible chain stock for bracelets or similar articles, a connecting bar *b* having the circular ends 8 8 and the circular center 9 in which is a central hole 10, as described.
- 5 6. In an expansible chain stock for bracelets or similar articles, the combination of the shells *a a*, connecting bars *b b*, coiled springs *c c*, intermediate shells, and pins *d d* secured at one end to the ends of the intermediate shells and extending through the coiled springs *c c* and
- 10 holes in the connecting bars *b b*, whereby the stock may be

expanded against the tension of the coiled springs and contracted by the tension of the coiled springs, as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses. 15

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Witnesses:

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