No. 787,747. PATENTED APR. 18, 1905.

C. T. GILMORE.

FLEXIBLE METAL FABRIC.

APPLICATION FILED AUG. 22, 1904.

Fig. 1.

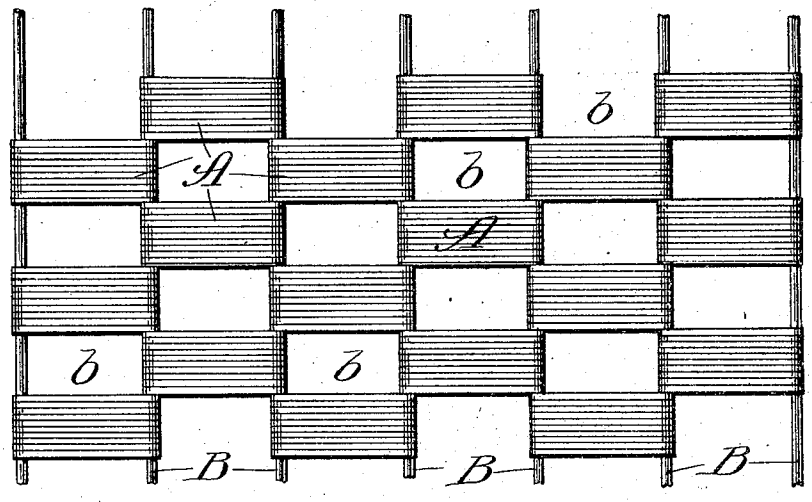


Fig. 2.

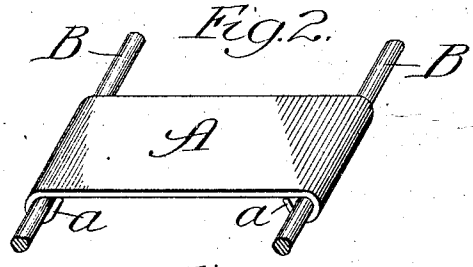


Fig. 3.

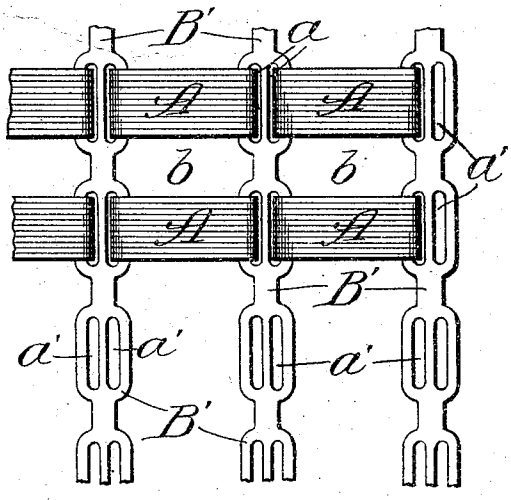
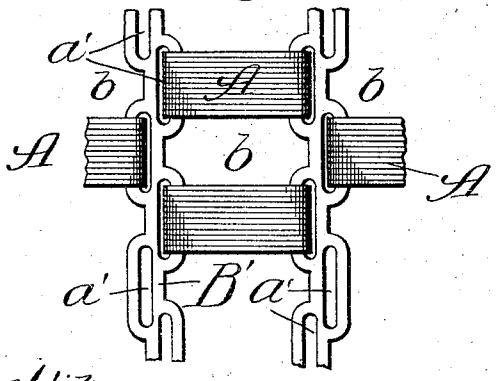


Fig. 4.



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No. 787,747. Patented April 18, 1905.

UNITED STATES PATENT OFFICE.

CHARLES T. GILMORE, OF CHICAGO, ILLINOIS.

FLEXIBLE METAL FABRIC.

SPECIFICATION forming part of Letters Patent No. 787,747, dated April 18, 1905.

Application filed August 22, 1904. Serial No. 221,691.

To all whom it may concern:

Be it known that I, CHARLES T. GILMORE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Flexible Metal Fabrics, of which the following is a specification.

The object of my invention is to provide, as a new article of manufacture, a flexible metal fabric of novel construction, adapting it to be used for endless aprons, endless belts, and the like, more especially in connections wherein it is desirable to have the apron, belt, or the like open for the free circulation through it of air for venting purposes, as in steam-mangles, for use with which I have more immediately devised my improvement.

To this end my invention consists in the general and also in the more specific construction of my improved article hereinafter described and claimed.

Referring to the accompanyings drawings, Figure 1 is a plan view of a section of my improved flexible metal fabric in its preferred construction; Fig. 2, an enlarged perspective view of one of the link-connected parallel rods in the form of construction represented in Fig. 1; Fig. 3, a view like that presented in Fig. 1 of a modified construction of the fabric, and Fig. 4 a similar view of a further modification.

A A are flat sheet-metal links, each furnished with eyes *a* on its opposite ends. In the preferred construction a desired number of these links are flexibly connected in parallel series thereof by bars in the form of rods passing through the coincident eyes of the link members in each series. The links in each series are disposed in staggered relation to the adjacent series, whereby those in successive series mutually overlap one another, with their respective eyes coinciding to admit through them a continuous metal rod B for flexibly connecting or hinging the series together, and a ventilating-space *b* is formed between each two of the links in each series, these spaces being thus also disposed in staggered relation from one series to the other. This construction is simple and cheap to manufacture and may be furnished in any lengths desired for endless belts and aprons required to possess the characteristics of flexibility and durability.

The same advantages, though in a modified degree, may be obtained by the construction represented in Fig. 3, wherein the rods B are supplanted by continuous bars in the form of sheet-metal strips B′, each provided at intervals along its length near the edges with elongated openings or slots *a′* in pairs, the members of each pair being on opposite sides of the longitudinal center of the strip, and the links A are hooked at their eyes *a* in these slots or openings, whereby they are flexibly connected in parallel series though without being disposed in staggered relation, as in the preferred construction described, since the links and spaces between them respectively aline throughout the succession of series thereof.

The staggered relation of the links and of the spaces between them is preferable, however, because of the better distribution thereby afforded throughout the fabric of the spaces for the circulation through them of air for ventilating and drying articles imposed upon the fabric in use—as, for example, in the endless carrying-apron on a steam-mangle for the laundry-work being mangled. This desirable staggered relation is not precluded by the structure of the fabric represented in Fig. 3, but may be embodied therein by providing the slots *a′* in each strip B′ in alternating order near its opposite edge portions instead of in pairs, whereby the links A and spaces *b* are in the same relative positions, as represented in the construction illustrated in Fig. 1. The modification last described is shown in Fig. 4.

What I claim as new, and desire to secure by Letters Patent, is—

1. As a new article of manufacture, a flexible metal fabric comprising parallel series of sheet-metal links with intervening spaces alternating with the links in each series thereof, and parallel metal bars hinging the series of links together, substantially as described.

2. As a new article of manufacture, a flexible metal fabric comprising parallel series of sheet-metal links with intervening spaces alternating with the links in each series thereof, said links having eyes on their ends, and par-

allel metal bars hinging the series of links together at said eyes, substantially as described.

3. As a new article of manufacture, a flexible metal fabric comprising parallel series of sheet-metal links with intervening spaces alternating with the links in each series thereof, and parallel metal bars hinging the series of links together, said links being disposed in staggered relation from series to series, substantially as described.

4. As a new article of manufacture, a flexible metal fabric comprising parallel metal rods and parallel series of sheet-metal links having eyes on their opposite ends through which said rods are passed to hinge said link series together with the links overlapping one another from series to series thereof and disposed in staggered relation from one series to the other and forming spaces alternating with the links in each series thereof, substantially as described.

CHARLES T. GILMORE.

In presence of—
L. HEISLAR,
WALTER N. WINBERG.