

E. H. BRODEN & J. G. MUSTIN.

METALLIC REEL.

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1,020,078.

Patented Mar. 12, 1912.

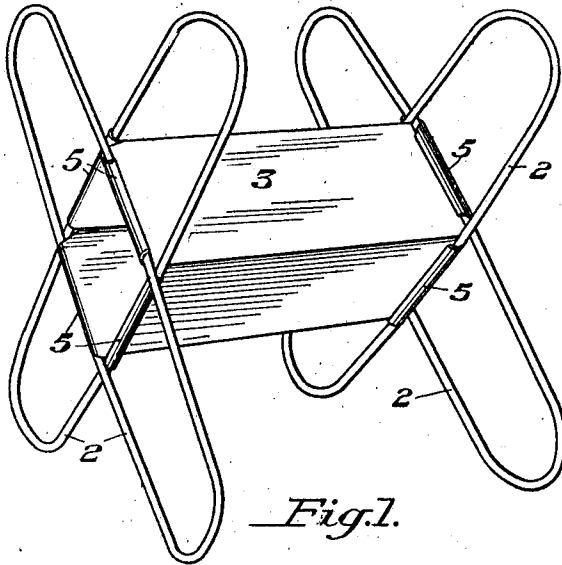


Fig. 1.

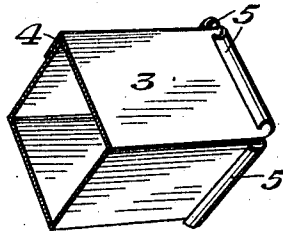


Fig. 2.

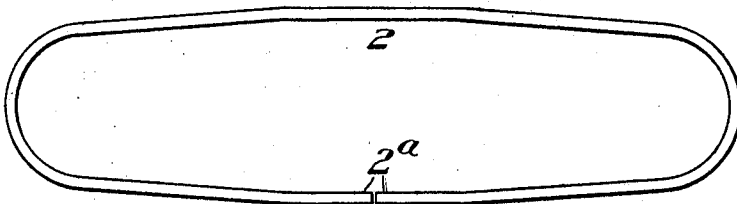


Fig. 3.

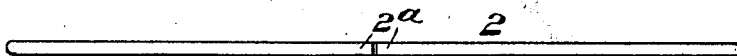


Fig. 4.

WITNESSES

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UNITED STATES PATENT OFFICE

EDWIN H. BRODEN, OF EDGEWOOD PARK, AND JAMES G. MUSTIN, OF WILKINSBURG, PENNSYLVANIA, ASSIGNORS TO THE AMERICAN STEEL & WIRE COMPANY OF NEW JERSEY, OF HOBOKEN, NEW JERSEY, A CORPORATION OF NEW JERSEY.

METALLIC REEL.

1,020,078.

Specification of Letters Patent.

Patented Mar. 12, 1912.

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To all whom it may concern:

Be it known that we, EDWIN H. BRODEN, of Edgewood Park, and JAMES G. MUSTIN, of Wilkinsburg, both in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Metallic Reels; of which the following is a specification.

Our invention relates to the spools or reels upon which wire, barbed wire fencing and similar materials are reeled or coiled in quantities or bundles of convenient size and weight for handling in storing and shipping. Heretofore, such reels have been largely formed of wood, and owing to lack of strength of the wood such reels frequently break or are otherwise damaged by the rough usage to which the coiled or bundled materials are subjected during the frequent handlings necessary in the storing and shipping operations. Such wooden reels also are expensive owing to the increasing cost of wood and the expense is added to by the general practice of discarding or destroying the reel after the wire or other material placed thereon has been removed in applying the wire or other material to the use for which it was ultimately intended.

One object of our invention is to provide an all metal reel adapted for use in coiling wire, barbed wire fencing and similar materials into bundles thereon in quantities of convenient size and weight for handling and shipment, and a reel which combines extreme lightness in weight with very great strength and rigidity, which is cheaply made and which can be repeatedly used in bundling successive quantities of wire thereon.

A further object of this invention is to provide a reel capable of sustaining the rough usage to which they are subjected in being handled in the storing and shipping operations.

Referring to the accompanying drawing forming part of this specification; Figure 1 is a perspective view of an all metal reel constructed and arranged in accordance with this invention. Fig. 2 is a perspective view showing a detail of the hollow metal cross member employed to connect together the wire rings which form the opposite end members of the reel in accordance with this invention. Fig. 3 is a plan and Fig. 4 a longitudinal side elevation showing a detail

of the elongated wire rings forming the end members of the reel.

In the drawings 2 designates the wire rings from which the end members are formed and 3 the hollow cross member employed to secure the rings 2 in place in their spaced apart position as assembled together in forming the reels in accordance with our invention.

The rings 2 forming the end members of the reel have semi-circular ends connected by outwardly bowed side portions as shown in plan in Fig. 3, the ends 2^a of the wire being located at a point intermediate of the ends of the ring when bent to form the ring.

The cross member 3 is formed by taking a sheet of metal and bending it so as to form an open ended box, square in cross section and having four sides. The overlapping longitudinal side edge 4 is preferably fastened to the side of the box contacting therewith by rivets although it may be left unsecured if desired. The opposite ends 5 of each side of the so formed box cross member are curled backwardly so as to tightly engage with the contacting surfaces of the wires forming the elongated rings 2 used to construct the end members of the reels. As shown in Fig. 1 two of the rings 2 are placed with their long axes at right angles in forming each end member and the joint in the wire forming each ring 2 is located so as to be covered by the overlapping backwardly curled portion of the box. When assembled in this manner a strong and rigid reel is formed which is light in weight, is easily and cheaply constructed and which is durable and can be used in a large number of successive, separate handling and shipping operations.

The assembled reels are used as is found necessary by placing the empty reel in position upon a reeling machine and filling it with wire for storage and shipment. After the wire has been removed in being put to the use for which it is intended, the reels, when a quantity of the empty reels have accumulated, are returned to the factory where they are again usable in further bundle forming operations.

The advantages of our invention will be apparent to those skilled in the art.

Modifications in the construction and ar-

range ment of the parts may be made without departing from our invention as defined in the claims.

We claim:—

- 5 1. A metallic reel comprising end members formed of an endless elongated wire ring and a hollow open ended cross member connecting said end members, said cross member being formed integrally of sheet metal, and having its end portions curled back-
10 wardly around the contacting portions of the rings to rigidly secure and hold the end members formed by the rings together in place.
- 15 2. A metallic reel comprising end members formed each of a plurality of elongated wire rings, the long axes of the rings of

each end member extending at right angles to each other and a hollow open ended cross member connecting said end members, said cross member being formed integrally of sheet metal and having its end portions curled backwardly around the contacting portions of the rings to rigidly secure and hold the end members formed by the rings together in place. 20 25

In testimony whereof, we have hereunto set our hands.

EDWIN H. BRODEN.
JAMES G. MUSTIN.

Witnesses:

G. T. CLARK,
R. M. NEELY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."