

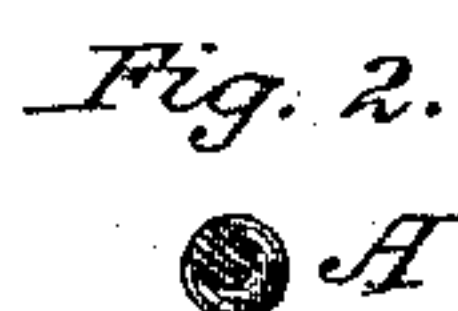
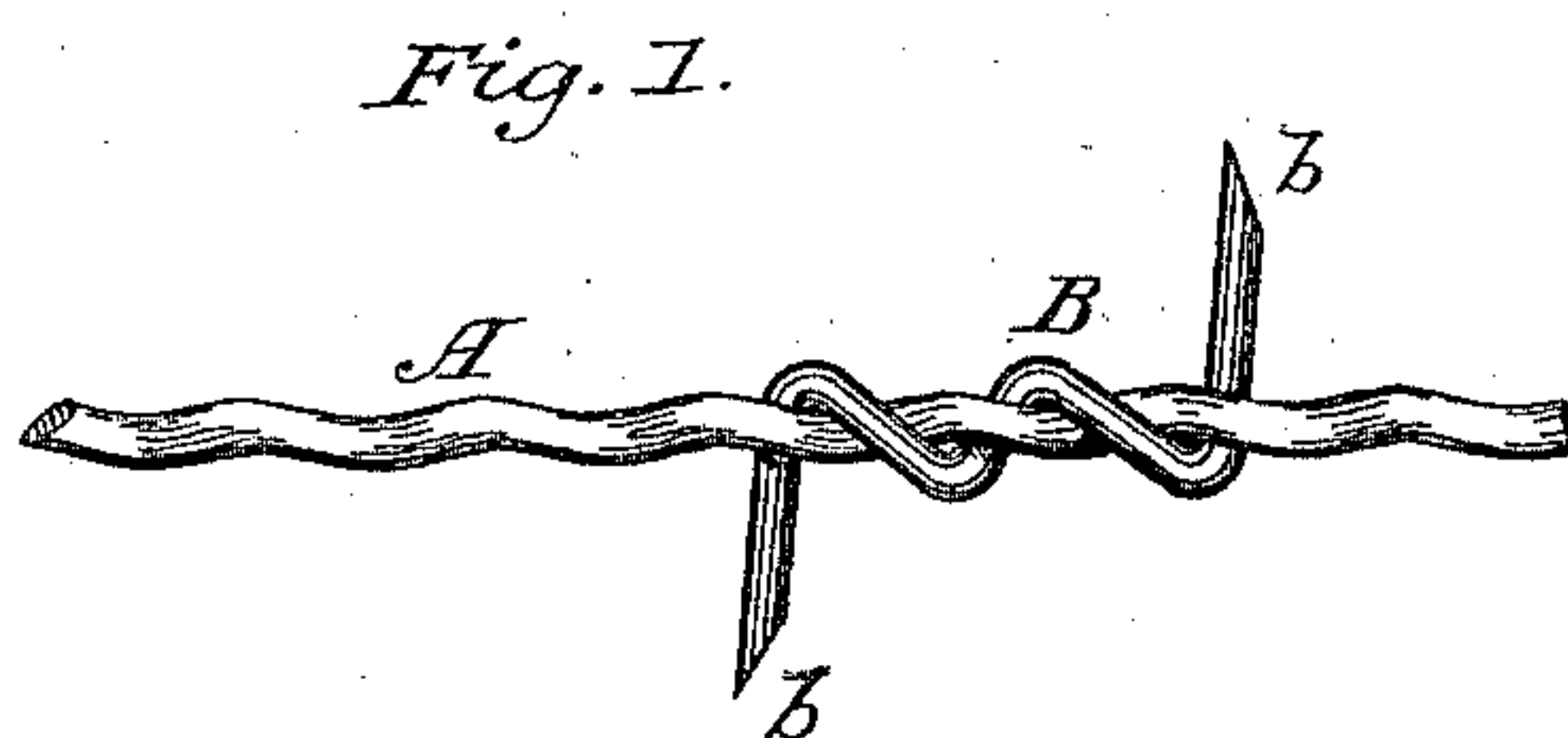
(No Model.)

O. P. BRIGGS.

FENCE WIRE.

No. 301,086.

Patented July 1, 1884.



WITNESSES—

F. W. Adams

C. C. Poole

INVENTOR—

Orlando P. Briggs
per W. E. Danton
Attorney

UNITED STATES PATENT OFFICE.

ORLANDO P. BRIGGS, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO
MELVILLE E. DAYTON, OF SAME PLACE.

FENCE-WIRE.

SPECIFICATION forming part of Letters Patent No. 301,086, dated July 1, 1884.

Application filed December 2, 1882. (No model.)

To all whom it may concern:

Be it known that I, ORLANDO P. BRIGGS, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful
5 Improvements in Fence-Wires; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which
10 form a part of this specification.

This invention relates to improvements in wires intended to be used singly for fence-wires, the object being to provide a construction whereby said wire is adapted to expand
15 and contract under changes of temperature, and also whereby said wire is made in some degree to resemble a twisted two-strand cable fence-wire, or at least to produce an effect calculated to arrest the eye more perfectly than
20 a straight wire, as single wires have heretofore been used.

The invention consists in a fence-wire bent to form short curves extending throughout its length, so that it presents a wavy or sinuous
25 line to the eye in all positions of the wire. It has been common heretofore to crimp the wire of a meshed fabric, so as to produce therein a series or succession of short bends; but such bends have been made in the same plane, so
30 that when the wire is laterally viewed in one direction the waves or bends are visible; but when viewed in another direction they present the appearance of straight wires. This is not my construction.

My invention also consists in a fence-wire spirally bent without having its fibers twisted to correspond with the curved or deflected direction of the wire. This feature of construction will be understood by referring to the ordinary mode of making coiled or spiral wire—
40 as, for example, for bed-bottom fabrics and other purposes—in which the wire is forced through a hollow spirally-grooved mandrel, or is otherwise operated upon to produce the same effect. In such operation the wire is
45 twisted as well as coiled, and applying longitudinal tension to such a coil, calculated to straighten the same, the tendency is to weaken or break the wires; whereas if the wire is spirally bent without being itself twisted, or with-

out being twisted to the same extent that it is coiled, said wire is capable of being straightened and relaxed without such tendency to disintegration and rupture as characterizes
55 wire that is equally coiled and twisted.

A machine for producing the spiral bends in the wire without at the same time producing a corresponding twist in the wire will form the subject of a separate patent. As a sufficient description of means for manufacturing such
60 wire, however, I here state that the wire may be made by feeding the same, without rotating it, through a stationary hollow mandrel having a straight aperture of sufficient size to allow the wire to pass through the same freely,
65 and arranging a rotating device at that end of said mandrel from which the wire emerges, said device being arranged to bear upon one side of the emerging wire at a short distance
70 from the end of the mandrel, so as to bend the wire off to one side. By the rotation of such bending device, as the wire is fed through the mandrel the lateral flexure will constantly
75 change its direction and the effect illustrated in the drawings will be obtained. The lateral deflections of the wire may be made of any desired extent. In Fig. 1 of the drawings the wire is bent in each spiral to a distance less than its diameter, so that said wire presents
80 the end view shown in Fig. 2. Fig. 3 shows the wire laterally bent in each spiral more than its diameter. These results may be varied to any degree.

A barb is conveniently applied to a fence-wire of this description in the manner shown
85 in Fig. 1, wherein B is a piece of wire pointed at *b b* at its opposite ends, and centrally bent about the fence-wire A in such manner as to follow the curves of the latter.

The wire A, constructed as described, has
90 the advantage over a plain single wire, when applied to use as a fence-wire, of being elastic to an extent sufficient to meet the requirements of changes in temperature, and also the advantage of being more distinctly visible to the
95 eye. In the last respect it much resembles a "double-and-twisted" fence-wire cable, such as is now in common use, one of the principal merits of which, as compared with the plain form of single fence-wire heretofore used, is
100

that it may be more plainly seen by cattle, not merely by reason of its greater size, but also by reason of its irregular form or direction.

I fully recognize the fact that wire has been
5 coiled and crimped, as hereinbefore stated, and also that in musical instruments coiled wire has been stretched between fixed points. I am also aware that bars have been drawn in such manner as to produce spiral grooves or flanges
10 thereon without changing the course of the fibers.

In view of the prior art, I claim as my invention—

1. As an article of manufacture, a single-
15 strand fence-wire provided with a series of short deflections or curves variously directed from the axis of the wire, whereby the wire

will present a sinuous appearance to the eye when viewed laterally from any direction, substantially as described. 20

2. A single-strand fence-wire spirally bent, but not having its fibers deflected to correspond with the spiral direction of the wire.

3. A single-strand fence-wire having short lateral variously-directed deflections, and provided with barbs, substantially as described. 25

In testimony that I claim the foregoing as my invention I affix my signature in presence of two witnesses.

ORLANDO P. BRIGGS.

Witnesses:

CYRUS KEHR,
PETER J. ELLERT.