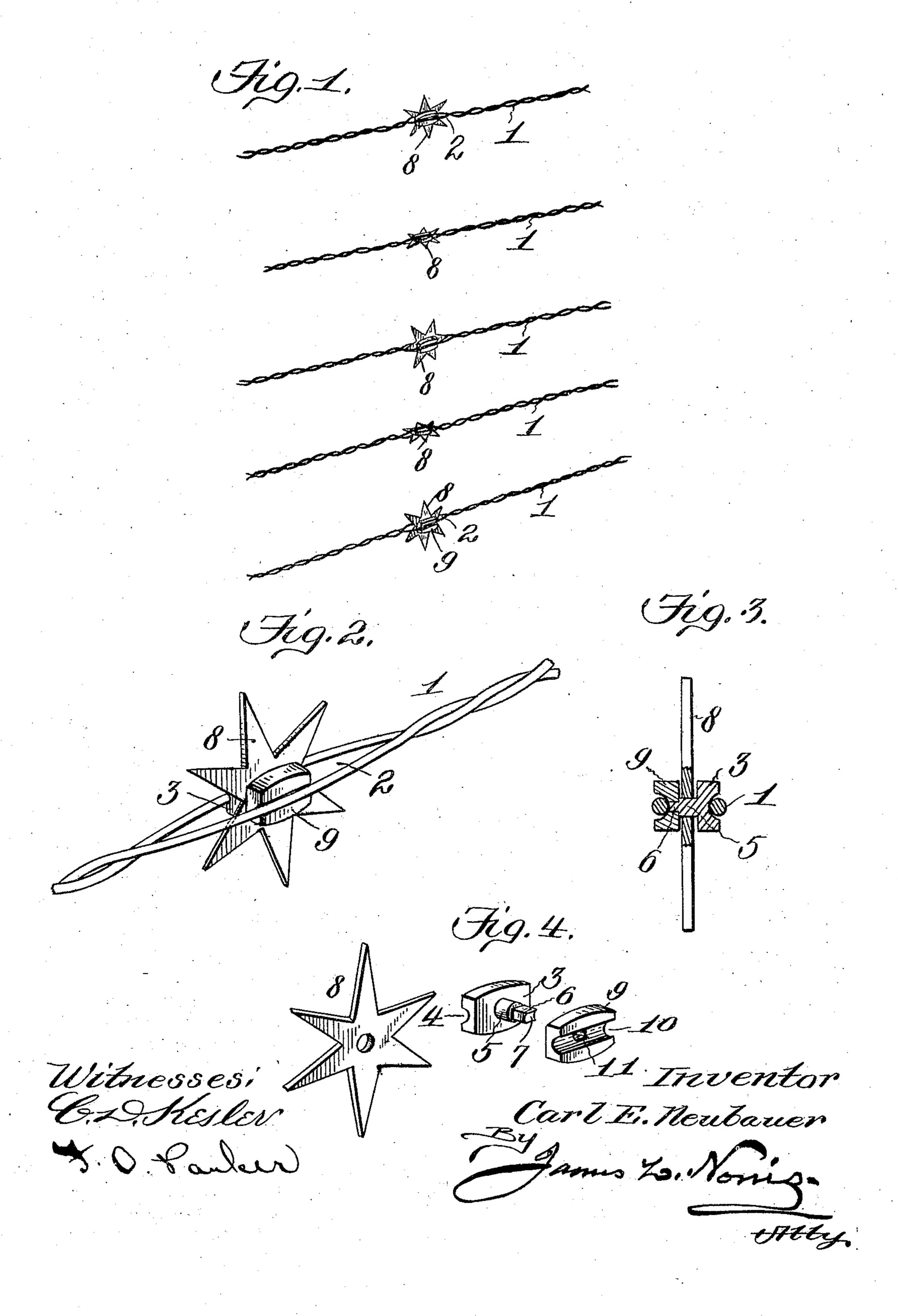
C. E. NEUBAUER. BARBED WIRE. APPLICATION FILED JUNE 22, 1905.



UNITED STATES PATENT OFFICE.

CARL E. NEUBAUER, OF CHISHOLM, MINNESOTA, ASSIGNOR OF ONE-FOURTH TO JOSEPH SCHREMS, OF CHISHOLM, MINNESOTA.

BARBED WIRE.

No. 805,932.

Specification of Letters Patent.

Patented Nov. 28, 1905.

Application filed June 22, 1905. Serial No. 266,510.

To all whom it may concern:

Be it known that I, Carl E. Neubauer, a citizen of the United States, residing at Chisholm, in the county of St. Louis and State of 5 Minnesota, have invented new and useful Improvements in Barbed Wires, of which the fol-

lowing is a specification.

This invention relates to barbed wire for fence structures and analogous purposes, and 10 particularly to the form of the barb and manner of applying it to a doubled twisted strand of wire. The barb structure is of that type embodying a member which is rotatably supported, and the improved construction facili-15 tates the application of the barbs to the wirestrands by embodying in the bearing means for the barb member separable elements positively held assembled by opposite portions of the wire-strand when applied to permit the 20 barb member to freely rotate and reduce the injury to cattle or live stock coming in contact therewith, but operating to effect the desired function of barbed-wire fences.

In the drawings, Figure 1 is a perspective 25 view of a portion of a five-strand wire fence having the improved barb structure embodied therein. Fig. 2 is an enlarged detail perspective view of a portion of one of the wirestrands with the improved barb disposed there-3° in. Fig. 3 is an enlarged transverse vertical section through the strand and barb. Fig. 4 is a detail perspective view showing the parts

of the barb supported.

Similar numerals of reference are employed 35 to indicate corresponding parts in the several views.

The numeral 1 designates a wire-strand consisting of a doubled length of wire which is twisted closely and has at intervals seats 2, 4º provided by unconnected portions of the strand and spread apart sufficiently to permit the removable introduction of the improved barb therein.

The improved barb structure consists of a 45 wire-engaging head 3, having a groove 4 extending centrally in a longitudinal direction through the outer side thereof. Projecting centrally from the inner side of the head 3 and integrally formed with the latter is a cylin-5° drical bearing-stud 5, having a coupling-shank 6 continuous therewith and angular or square in cross-section. The free end of the couplingshank is formed with a concaved groove 7, extending in the same direction as the groove 4

in the outer side of the head 3. The rotata- 55 ble barb member 8 has a plurality of radiallyarranged spurs or is of star shape and of such thickness as to extend over the stud 5 only and leave the shank 6 clear for the application thereto of a removable head 9, also having a 60 longitudinal groove 10 in the center of its outer side and, further, provided with a central square or angular opening 11 to receive the shank 6, the groove 7 in the free end of the shank coinciding with the groove 10 of 65 the head 9 to avoid the formation of any ob-

struction in the said groove.

The barb member 8 is first disposed on the bearing-stud 5, and the head 9 is then placed over the shank 6, and the parts while thus 7° held assembled are inserted in the seat 2 and the oppositely-disposed wires caused to engage the grooves 4 and 10 of the opposite heads 3 and 9. The tension of the opposite wires of each strand of the heads 3 and 9 will 75 operate to prevent accidental disengagement of the barb structure as an entirety from the wire-strand and also center the barb member 8 and permit the latter to have free rotation through the seat 2. In the event that any part 80 of the barb structure becomes broken it may be readily replaced by another similar structure, or in erecting a fence embodying the improved barb arrangement the several barbs may be introduced throughout the wire-strands 85 at distances apart found desirable or convenient without in the least modifying the effectiveness of the wire-strand as an inclosing means when embodied in a fence structure.

The wire-strands having the improved barb 9° structure therein may be used throughout a fence having five strands or a greater or less number of strands or applied individually to a top of a fence as a guard-wire. It is also proposed to vary the dimensions and propor- 95 tions of the several parts of the barb structure to accommodate various applications.

The use of the improved barb structure will be found exceptionally advantageous, in that less injury will result to cattle or other live 100 stock coming in contact with a fence embodying the same in view of the movement of the barb member 8. The capability of replacing any of the barb members by others will render a fence structure of this class more dura- 105 ble and economical, and it will also be understood that any suitable metal may be employed in constructing the several parts of the

improved barb structure as well as the wirestrands.

Having thus described the invention, what is claimed is—

5 1. A strand for a fence structure and the like, consisting of a doubled wire having open seats therein at regular intervals, and a barb organization including a detachable rotatable barb member and opposite heads having grooves in their outer sides to receive portions of the strand, one of the heads being removable.

2. A strand for fence structures and the like, consisting of a doubled wire having open seats arranged therein at regular intervals, and a barb organization consisting of a rotatable barb member and opposite heads engaged by portions of the wire defining the seats, the several parts of the barb organization including the said barb member being readily detachable.

3. A strand for wire-fence structures and the like, consisting of a doubled wire having open seats therein at intervals, and a barb organization including a rotatable member and heads between which said member is mounted, the heads being separable from the member and held in assembled relation by engagement therewith of opposite portions of the wire.

4. A barb organization for wire-fence structures or the like, consisting of a head having a bearing-stud extending inwardly therefrom and a coupling-shank continuous with the

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stud, a rotatable barb member held on the 35 stud, and a second head removably applied to the shank.

5. A barb organization for use in fence structures or the like, consisting of a head having bearing means projecting therefrom, 40 a rotatable barb member disposed on the said bearing means, and a second head removably applied to the bearing means.

6. A barbed-wire organization consisting of a head having a groove in its outer side 45 and an inwardly-projecting bearing-stud with a continuous shank angular in cross-section, a rotatable barb member disposed on the bearing-stud, and a second head having a groove in its outer side and a central angular 50 opening to removably fit over the said shank.

7. A barb organization consisting of a head having a groove in its outer side and an inwardly-projecting bearing-stud provided with a continuous shank angular in cross-section, 55 a star-shaped barb member disposed on the bearing-stud, and a second head with a groove in its outer side and a central angular opening to receive the shank, the free end of the shank being grooved to coincide with the 60 groove in the head engaging the same.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CARL E. NEUBAUER.

Witnesses:

RICHARD BEETESON, DENNIS MADDEN.