(No Model.)

E. JORDAN.

METHOD OF MAKING BARBED FENCING.

No. 507,227. Patented Oct. 24, 1893.

Fig. 1.

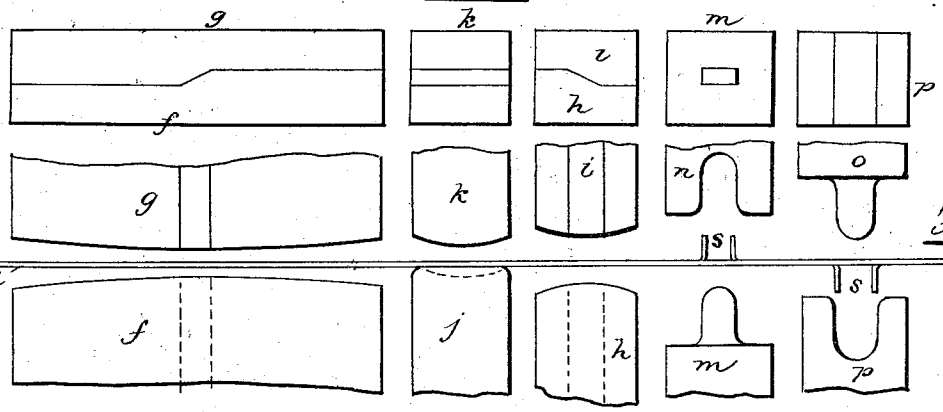


Fig. 2.

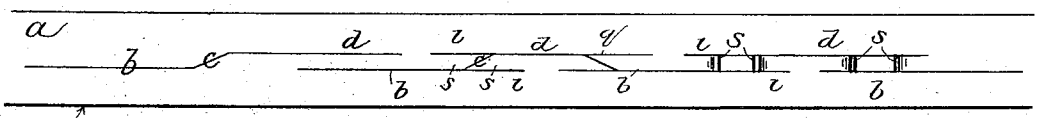


Fig. 3.

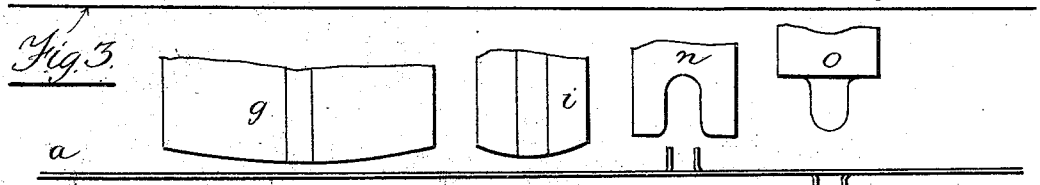
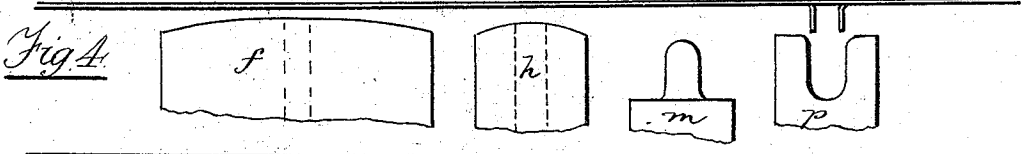


Fig. 4.



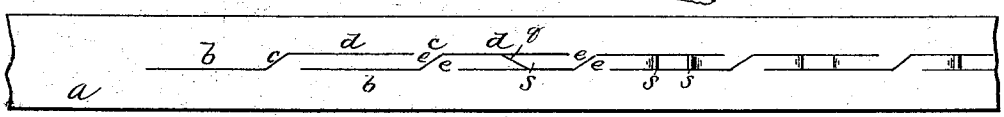


Fig. 5.

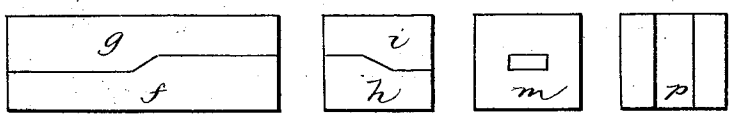


Fig. 6.

WITNESSES:

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EDMUND JORDAN, OF BROOKLYN, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THOMAS V. ALLIS, OF NEW YORK, N. Y.

METHOD OF MAKING BARBED FENCING.

SPECIFICATION forming part of Letters Patent No. 507,227, dated October 24, 1893.

Application filed June 8, 1888. Serial No. 276,519. (No specimens.)

To all whom it may concern:

Be it known that I, EDMUND JORDAN, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Methods of Making Barbed Fencing, of which the following is a specification.

This improved method of making barbed metallic fencing consists of producing two barbed strips from one blank strip by slitting a plain flat blank strip of metal which is equal in width to two barbed strips to be made plus the breadth of the barbs by intermittent slits which offset in an oblique line from one plane to another and so overlap that the offset line of each slit crosses from the plane of one part of the slit to that of the other between and in close proximity to the ends of the next slits each way by which bars from which to form barbs are separated along their edges from the two strips which are also nearly separated by the same means from each other but said bars remain connected at the ends to the respective strips and are subsequently separated obliquely at the middle to point them and effect the complete separation of the strips, and then the barbs so formed are bent laterally to the strips for causing them to project as required, thus making one laterally projecting barb alternately on each strip, but for making two similarly projecting barbs together on each strip alternately, which is the preferable way, the said overlapping slits are made longer with greater distance between the offset lines and the ends of the next slits each way, and other slits are made in prolongation of the parallel portions of said slits each way across the offset line so that two barbs are made thereat beside the two others from the bars subsequently separated, and thus two barbs are formed together on each strip intermediately and they are likewise bent for lateral projection as hereinafter fully described.

In the drawings: Figure 1 represents face views of said slitting and bar cutting dies and of one each of two pairs of bending dies for bending the barbs. Fig. 2 represents a side elevation of the dies for slitting the blank strip and cutting the bars to make two barbs alternately on each strip, together with the bending dies and a blank strip between the dies. Fig. 3 is a diagram of the blank strip showing the action of the dies of Figs. 1 and 2 on it. Fig. 4 is a side elevation of the dies for making single barbs on each strip alternately. Fig. 5 is a diagram of the blank strip showing the action of the dies of Figs. 4 and 6 on it. Fig. 6 represents face views of the slitting and bar cutting dies, and of one each of the bending dies as in Fig. 4.

I take a plain flat strip *a*, and make interval slits *b*, *c*, *d*, in it, the part *c*, being an oblique offset from *b*, to *d*, which are in different parallel planes as wide apart as the desired width of the barbs, said offset being at the middle of the slit. When the barbs are to be in the single order along the strips, the slits are advanced along the strip a distance equal to the distance the barbs are to be apart on the finished strips as in Fig. 5, and the length of the slits is in this case such that being so advanced the distance from offset *c*, of one slit to the beginning of the next slit is the length of metal left at *e*, connecting the barbs at the base with the strips, which may be more or less as preferred, being varied as the slits are made longer or shorter, but it is designed to have ample metal thereat to form substantial connection of the barbs. The length of the barbs is governed by the length of the slits, the slits being made longer for longer barbs or shorter for shorter ones; but where two barbs are to be formed together on each strip intermediately the slits *b*, *c*, *d*, are made longer and are also advanced along the strip relatively to each other the length of a barb more than in the other case, as represented in Fig. 3. For making these slits dies *f*, *g*, are employed which are alike in form for both cases but differ in length and the strip is to be fed the length of two barbs in one case, and of four in the other. It proceeds in the former case to the bar cutting dies *h*, *i*, by which the bars made between parts *b*, and *d*, of the successive slits are cut apart at *q*, and barbs *s*, are formed; but in the latter case it is next presented to the parallel edged slitting dies *j*, *k*, whereby the slits *l*, are made in prolonga-

tion of lines *b*, *d*, across offset line *c*, making two barbs thereat and also to the bar cutters *h*, *i*, which at the same time cut apart the bar made between the slits and form two other barbs. From the bar cutters the next feed shift presents the barbs ready for bending to the bending dies *m*, *n*, and *o*, *p*, arranged in two pairs for bending the barbs laterally to the strips and alternately in opposite directions, said dies consisting of male and female members suitably contrived for so bending the barbs as clearly represented in the drawings. In the making of four barbs to one feed shift as in Figs. 1, 2, and 3, both pairs of these bending dies will operate contemporaneously with the rest, but in the other arrangement for making only two barbs to one feed shift these dies will only act with each alternate operation of the rest. One pair would be sufficient in this case if the barbs were all to be bent one way, but two pairs are required to bend in opposite directions, and as they together bend four barbs at one operation they must rest during one operation of the other dies making only two barbs at a time.

So far as the overlapping interval slitting for separating the double blank and cutting the barbs from the edges of the strips is concerned it is substantially the same as in the method, which is the subject of the patent granted to me March 17, 1885, No. 314,183, and is not broadly claimed herein in which new method I have contrived to utilize that plan of cutting together with the cutting of the bars to separate and point the barbs and with bending devices, which make laterally projecting barbs, all operative together with the cutting dies to complete the cutting, separating and bending in one operation. Suitable guides will be employed for preventing the cut parts of the blank from spreading under the influence of the dies, but I reserve the apparatus herein described for a separate application for a patent.

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

1. The method of producing from a double blank strip two barbed strips having barbs at intervals along the edge which consists of making offset overlapping slits at intervals along the blank, forming bars of which to make barbs and partly separating the blank; and contemporaneously separating said bars and thereby completely separating the blank and pointing the barbs, substantially as described.

2. The method of producing from a double blank strip two barbed strips having barbs at intervals along the edge and bent laterally to the strips which consists of making offset overlapping slits at intervals along the blank forming bars of which to make barbs and partly separating the blank; and separating said bars and thereby completely separating the blank and pointing the barbs and finally bending the barbs laterally to the strips, substantially as described.

3. The method of producing from a double blank strip, two barbed strips having barbs at intervals along the edge which consists of making offset overlapping slits at intervals along the blank, forming bars of which to make barbs and partly separating the blank; making other slits each way from the offset portion of the overlapping slits to form and point other barbs, and separating the bars formed by the overlapping slits and thereby completely separating the blank and pointing the barbs formed by said bars, substantially as described.

4. The method of producing from a double blank strip, two barbed strips having barbs at intervals along the edge and bent laterally to the strips which consists of making offset overlapping slits at intervals along the blank, forming bars of which to make barbs and partly separating the blank; making other slits each way from the offset portion of the overlapping slits to form and point other barbs, separating the bars formed by the overlapping slits and thereby completely separating the blank and pointing the barbs formed by said bars, and finally bending the barbs laterally to the strips substantially as described.

Signed at New York city, in the county and State of New York, this 7th day of May, A. D. 1888.

EDMUND JORDAN.

Witnesses:
W. J. MORGAN,
GEO. T. JANVRIN.