(No Model.)

G. R. ELLIS & W. HELFENBERGER.

METALLIC FENCE POST.

No. 551,583. Patented Dec. 17, 1895.

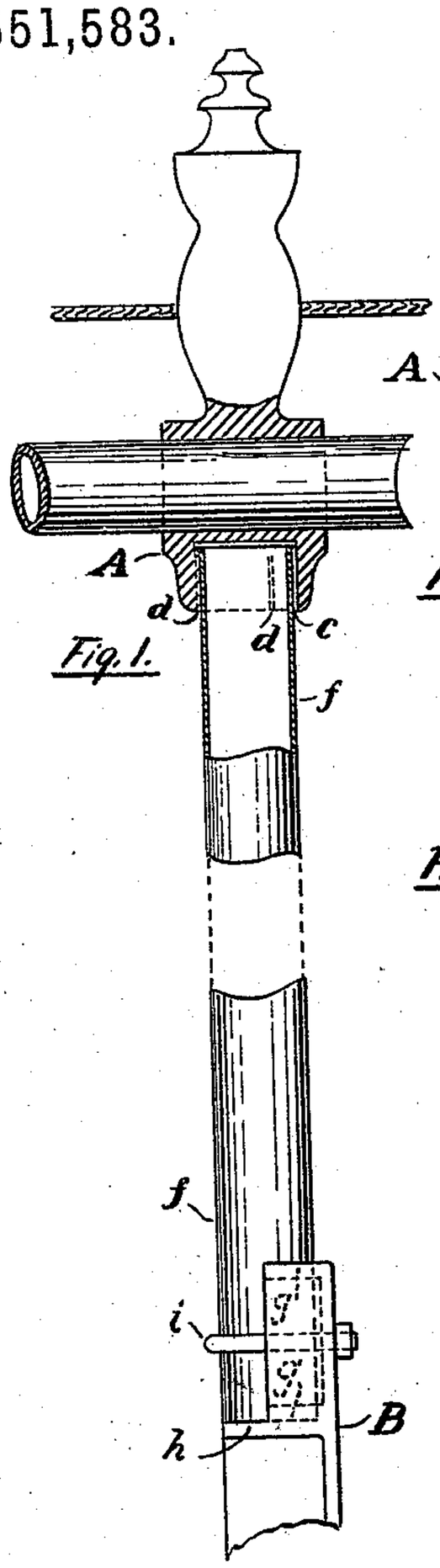

Fig. 1.

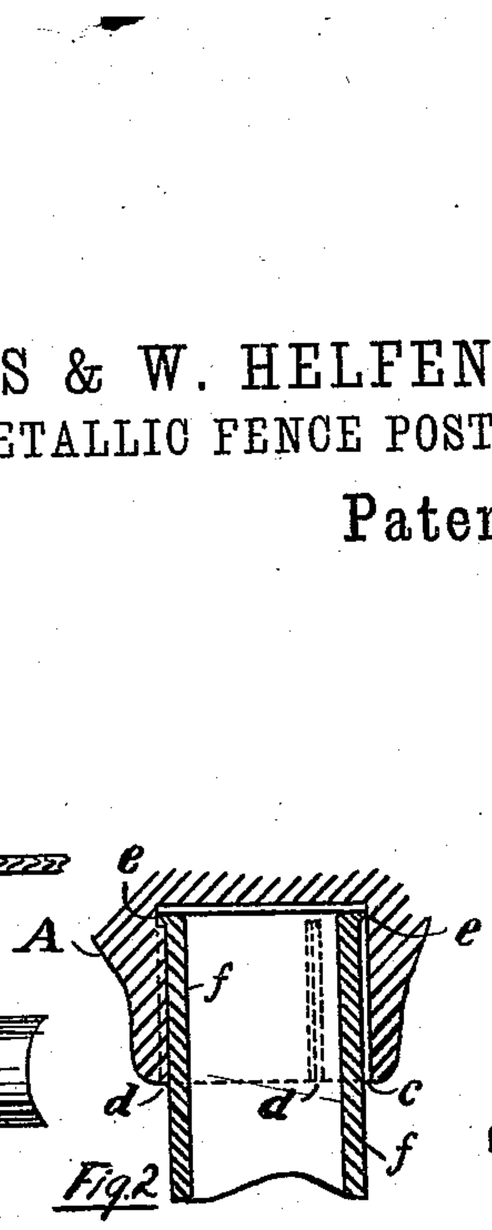

Fig. 2.

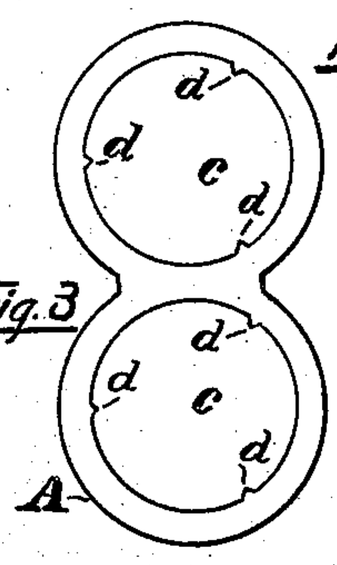

Fig. 3.

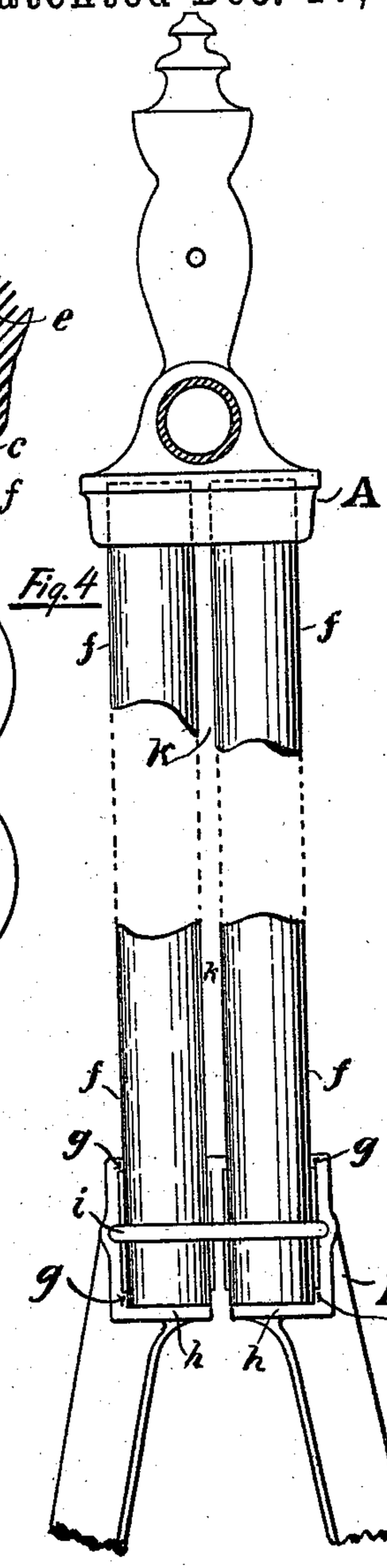

Fig. 4.

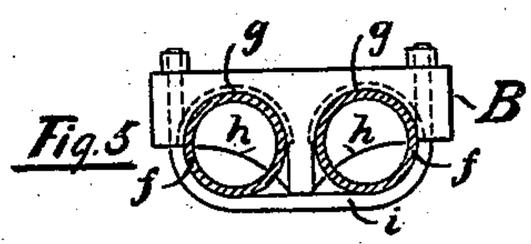

Fig. 5.

Witnesses:-

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UNITED STATES PATENT OFFICE.

GEORGE R. ELLIS AND WILLIAM HELFENBERGER, OF INDIANAPOLIS, INDIANA.

METALLIC FENCE-POST.

SPECIFICATION forming part of Letters Patent No. 551,583, dated December 17, 1895.

Application filed July 5, 1895. Serial No. 554,921. (No model.)

To all whom it may concern:

Be it known that we, GEORGE R. ELLIS and WILLIAM HELFENBERGER, citizens of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Metallic Fence-Posts; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Our invention relates to that class of fence-posts which are composed of a number of parts and sometimes of different kinds of metal; and it consists of a single or double combination metallic post embodying novel and valuable features in form and construction, which will be hereinafter more fully described and explained.

In the present state of the art metallic posts are constructed in many ways, usually with a foundation and cap cast onto a post of wrought tubing, while others are connected by means of screws, bolts, rivets, or pins, the latter mode being expensive and unreliable in service, while the former method makes cumbersome parts for shipping, the cap or cap ornaments often becoming broken off while being handled, while there is no provision made for renewing them. In that class in which many parts are used for securing the foundation and caps to the tubes their multiplicity is expensive. In some kinds there is no provision for the escape of water from the bottom of tubes, which therefore rapidly corrodes on the inside, thus deteriorating and shortening the life of the post. In that class where the cap-casting is driven into the tube as a simple means of construction the tube invariably corrodes at its top just beneath the point of contact with the casting, the corrosion destroying the paint from that point downward, so that such post presents a rusted ring below the cap unless frequently repainted.

Our object is to eliminate all these disadvantages, and with this in view we have constructed a combination-post composed of either one or two upright pieces of tubes with cast-iron foundation and cap pieces. It is easily manufactured, simple in design, and durable in use, as will be fully illustrated by reference to the drawings which form a part of this specification, in which similar letters refer to like parts shown in the drawings.

Referring to the drawings, Figure 1 is a side elevation of a single post with upper end of tube and socket-cap in section. Fig. 2 is an enlarged vertical sectional view of top end of post and socket-cap. Fig. 3 is a plan of cap with double sockets. Fig. 4 is a vertical view of a double or line post; and Fig. 5 is a plan of top of foundation, showing cross-section of tubes.

In practical application the tubes are cut off to the desired length by the process in which the roller cutters are employed, by means of which a slight bur or fin is turned up or raised on the outside of the tube close to the end, as shown at *e*, Fig. 2. The ornamental top having at its lower end the cap A, containing the socket *c*, is cast slightly larger in diameter than the outside of tube, having on its sides a number of longitudinal ribs *d* extending from the mouth of socket nearly to the bottom of same. The tube is driven into the socket until the annular rib on the end of the tube *f* has traversed and passed above or beyond ribs *d*, the ends of which impinge against the annular rib as the tube expands after having reached that point, securely locking the two parts together. This method of attaching the top or cap piece to a post permits of the parts being packed separately for shipment, and may be connected when posts are set up without the aid of experienced help or special tools, which is a great advantage, and in case of a top being broken a new one can be procured and readily applied by any one the same way.

The method of attaching the post or tube *f* to base B is shown in Figs. 1, 4, and 5, being held together by an ordinary form of U-bolt *i*. The foundation-casting has a base or shoulder *h* covering only a portion of the open end of tube, leaving part of the opening clear to permit moisture from the inside to drain out of it into the earth, while the same is covered with earth to the top of foundation-casting

so that the air cannot enter from below, thus protecting the post from the evil effects of air combined with moisture inside the tube.

For the purpose of providing a positive means for clamping the bottom of post to foundation and to guard against the connection becoming loose when subjected to the strains caused by the load of the supported fences we have constructed the clamp-seat of the foundation with ribs *g*, extending through about a half-circle, against which the end of tube rests alone, while the U-bolt is drawn against the opposite side of the tube midway between the two opposing supports or ribs. By this method there is no possible movement between the two parts, as would occur when the tube is clamped in a plain trough or groove. This method of construction permits of the different parts being shipped separately in compact form, and may be connected at pleasure by any one without having previous experience.

The double post, Fig. 4, when used as a line post in connection with woven or webbed wire fencing, has the advantage of presenting the clear opening *k* through which the web may be stretched, and after being secured to the end or corner posts is then secured to the line posts without danger of throwing the latter out of plumb. Various methods of securing the web to the posts may be used.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In a single or double tubular metallic fence post having a separate top cast in one piece with a socket in its bottom to receive the upper end of said post, the combination of the vertical longitudinal ribs *d* integral with the walls of said socket, with the annular rib *e* integral with said tubular post surrounding it at its upper end, and the said tubular post inserted at its upper end into the said socket and removably secured therein by means of said longitudinal and annular ribs, substantially as shown and described.

2. The combination, with a single or double tubular metallic fence post having an annular rib or fin around the outside of its upper end, of a socket cap made in one piece, said socket having a series of longitudinal ribs integral with the inner wall of said socket extending from the opening or mouth thereof to a point near the bottom of same to secure said socket to said post, substantially as shown.

3. In a single or double tubular metallic fence post having detachable cast top and detachable cast iron base or foundation casting, the combination of one or two semi-circular walls or vertical side-bearings for lower end of said post or posts having the semi-annular ribs *g* at top and bottom of said wall, the rest *h* at bottom of said wall, said wall, ribs and rest being cast integral with said base casting, and the U-bolt *i* attached and securing said posts against the said side-bearings, so that the pressure of said U-bolt is toward said ribs and approximately midway between them, substantially as shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

GEORGE R. ELLIS.
WILLIAM HELFENBERGER.

Witnesses:
JOHN L. GRIFFITHS,
ALFRED F. POTTS.