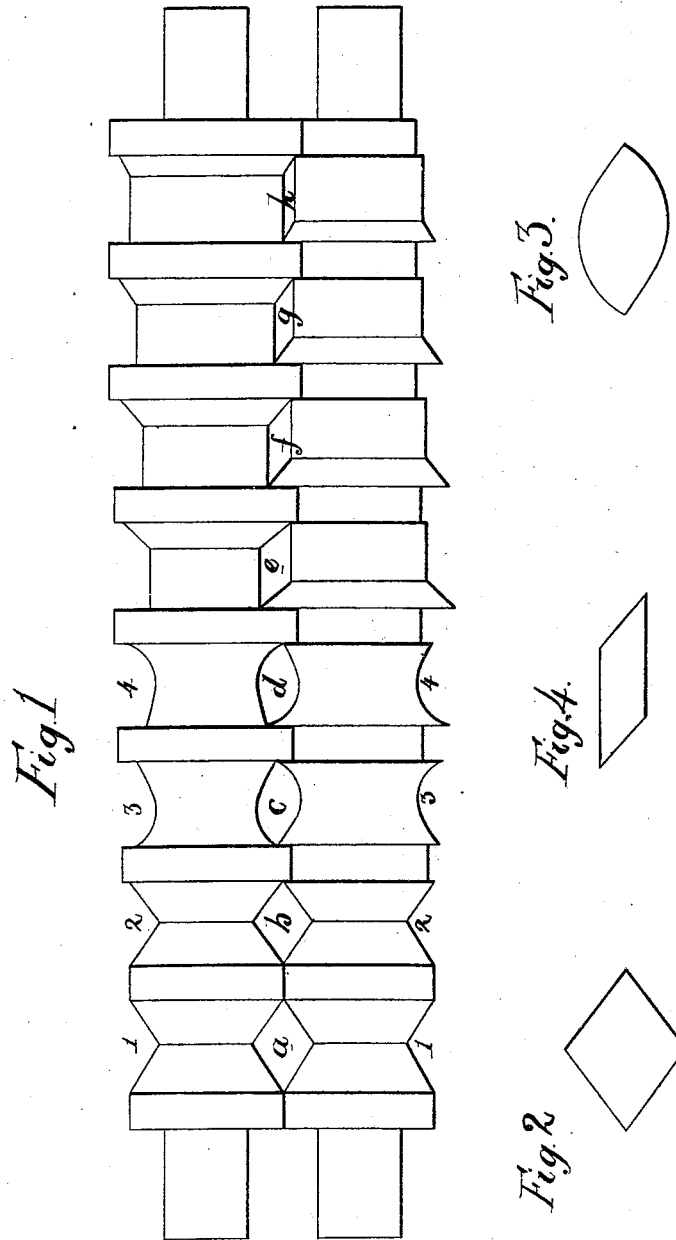


**J. C. GETZ.**  
**Skelp-Forming Rolls.**

No. 166,359.

Patented Aug. 3, 1875.



Witnesses,  
*Harry Smith*  
*Hubert Howson*

*Joseph C. Getz*  
 by his Attorneys,  
*Howson and Son*

# UNITED STATES PATENT OFFICE

JOSEPH C. GETZ, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO ASA O. DENIO, OF WILMINGTON, DELAWARE.

## IMPROVEMENT IN SKELP-FORMING ROLLS.

Specification forming part of Letters Patent No. **166,359**, dated August 3, 1875; application filed April 12, 1875.

*To all whom it may concern:*

Be it known that I, JOSEPH C. GETZ, of Philadelphia, Pennsylvania, have invented certain Improvements in Skelp-Forming Rolls, of which the following is a specification:

The object of my invention is to roll at one heat tube-skelps with well-defined beveled edges by means of rolls grooved to present openings having the general conformation illustrated by Figures 2, 3, and 4 of the accompanying drawing, Fig. 1 being a view of the rolls.

A square bar is first passed between the rolls through the opening *a*, presented by the grooves 1 1, Fig. 1, which, without depriving the bar of its quadrangular shape, reduces it in size, and makes it wider across the corners in one direction than it is in the other. The bar is then passed through the opening *b*, presented by the grooves 2 2, and is thereby further reduced by making it still narrower across the corners in one direction than in the other. The third pass reduces the bar to the shape of the opening *c*, formed by the grooves 3 3, this being the first change of the bar from a quadrangular form, a section of the bar, after the third pass, presenting a figure bounded by two sides, each of which is partly straight and partly rounded, the two sides meeting at opposite sharp edges. The fourth pass is made through the opening *d*, formed by the portions 4 4 of the rolls, which present an opening of a shape allied to that of the opening *c*, but such as to flatten the rounded portions of the bar on each side of the same near each edge.

It should be understood that after the bar has passed through the opening *c* it should be turned before permitting it to pass through the opening *d*.

The next pass through the opening *e* reduces the bar to a rhomboidal sectional form, and this shape is maintained during the further reduction of the bar by passing it through the

openings *f*, *g*, and *h*, the last pass reducing the bar to the desired form of the skelp. After the bar has passed through the opening *e* it should be turned before it is passed through the opening *f*, and again turned before passing through *g* and *h*, this turning of the bar resulting in the formation of well-defined sharp edges, as will be readily understood by those familiar with rolling operations.

Figs. 2, 3, and 4 indicate the changes in the form of the bar, intermediate changes being those of degree and not of general conformation.

A good skelp-bar must have perfectly-formed beveled edges, and it is of especial importance that the extreme sharp edges should be well defined—a result which is brought about by never losing sight of these required edges from the first pass through *a* to the final pass through *h*, for the opening *a* defines these extreme edges in the first instance, and the sharpness of these edges is maintained throughout.

The rolls may present but one opening, or more than two openings of the character designated by the letters *a* and *b*, and the same with the openings of the form *c*, *d*, and the group of openings of the form *e*, *f*, *g*, and *h* may be increased in number, as the desired size of the skelp-bar and other circumstances may suggest.

I claim as my invention—

Skelp-rolls grooved as set forth, so as to reduce a bar first to the form Fig. 2, then to the form Fig. 3, and then to that represented by Fig. 4, as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH C. GETZ.

Witnesses:

HUBERT HOWSON,  
HARRY SMITH.