

(No Model.)

H. J. CHAPIN.

CRUSHING ROLL.

No. 321,007.

Patented June 30, 1885.

Fig. 2.

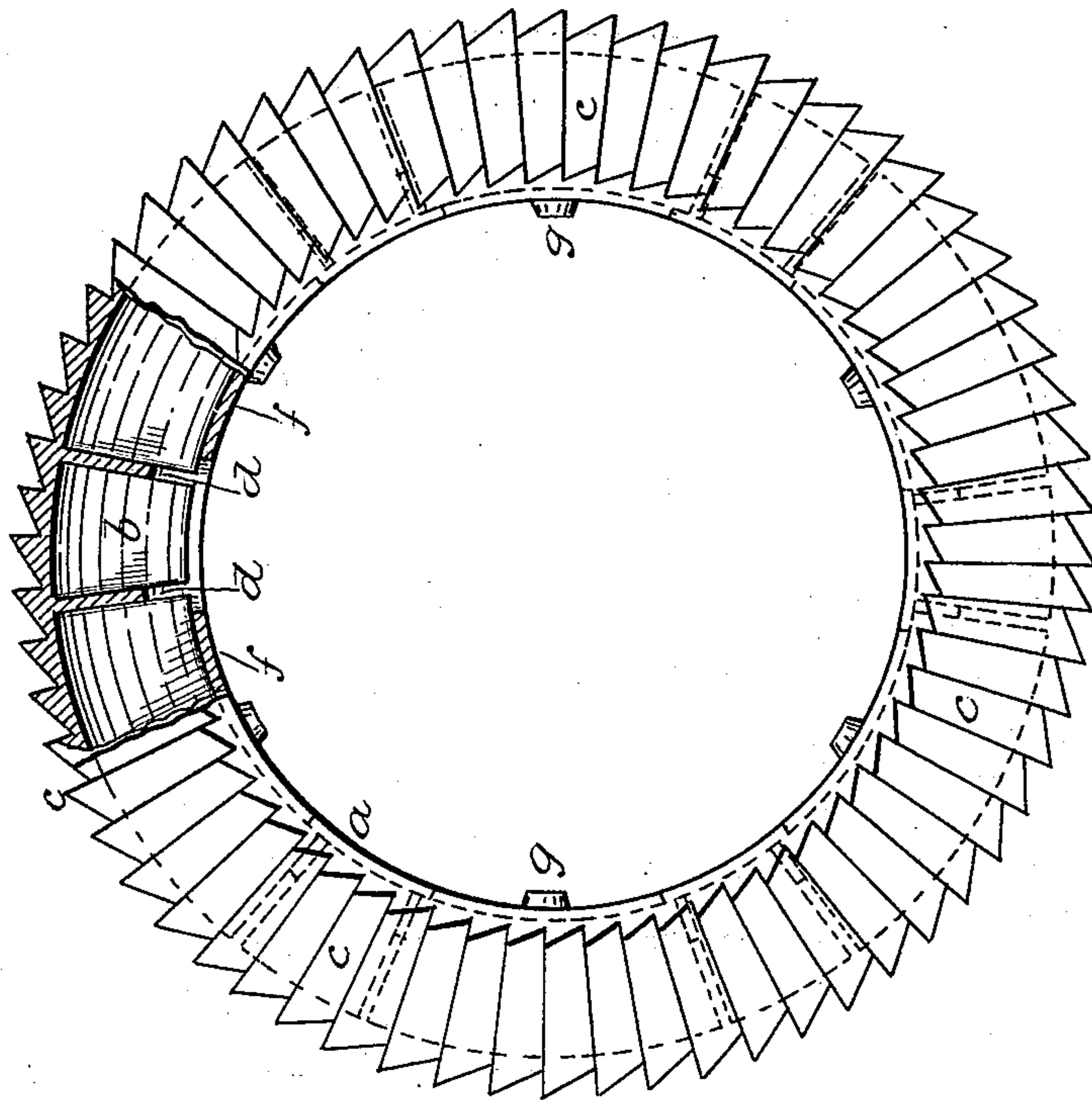
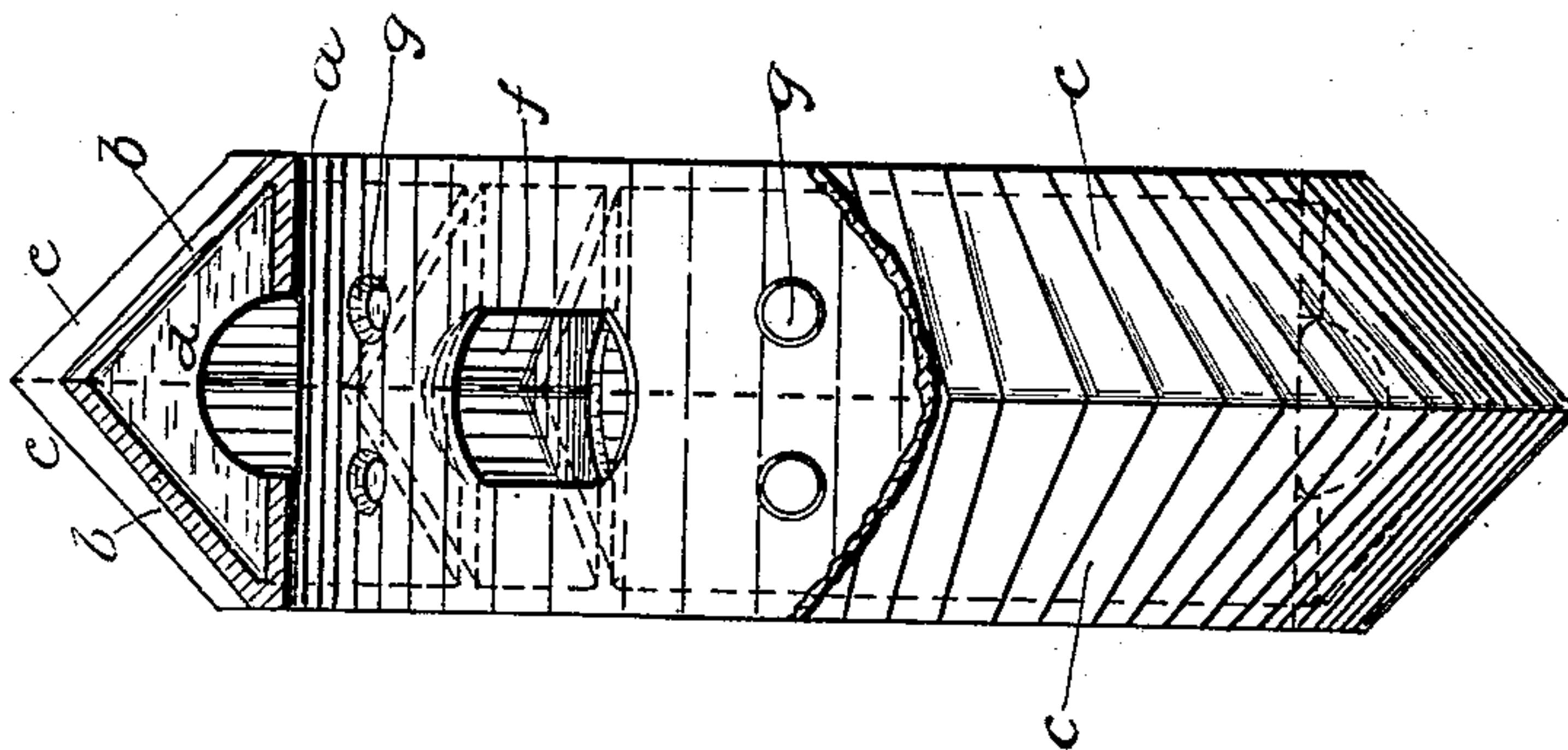


Fig. 1.



WITNESSES

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CRUSHING-ROLL.

SPECIFICATION forming part of Letters Patent No. 321,007, dated June 30, 1885.

Application filed January 2, 1885. (No model.)

To all whom it may concern:

Be it known that I, HENRY JUDSON CHAPIN, a citizen of the United States of North America, and a resident of the city, county, and State of New York, have invented a new and useful Improvement in Crushing-Rolls, of which the following is a specification.

The object of this invention is to improve the construction of the angular toothed grinding disks or rings of a roller-mill.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is an edge view, partly in section, of the improved ring or disk. Fig. 2 is a side view of the same with parts broken away to exhibit other parts.

The ring or disk herein shown is triangular in cross-section, as seen in Fig. 1. The inner circle, *a*, of the ring forms the base of the triangle, while the sides *b* of the triangle are formed by the periphery of the ring, upon which are cast, as integral parts thereof, the grinding-teeth *c*, which come together to form a projecting ridge along the apex of the triangle. Webs *d*, radiating from the circle *a* to

the periphery *b*, serve to strengthen the structure, and openings *f* through the circle *a* serve for the removal of the core from the casting. Bearing-studs *g*, of a soft metal or alloy, are inserted in the face of the circle *a* to facilitate the accurate adjustment of the disk or ring on drum or shaft.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A hollow crushing-disk for grinding-mills cast in the form of a triangle in cross-section, comprising the ring *a*, toothed surfaces *b*, and webs *d*, as specified.

2. The combination, with grinding-ring cast hollow and triangular in cross-section, and having toothed surfaces *b c* and annular ring-surface *a*, of soft-metal studs *g*, projecting centrally from the inner surface of the ring *a*, as set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 29th day of December, 1884.

HENRY JUDSON CHAPIN.

Witnesses:

JACOB J. STORER,

W. B. TURNER.