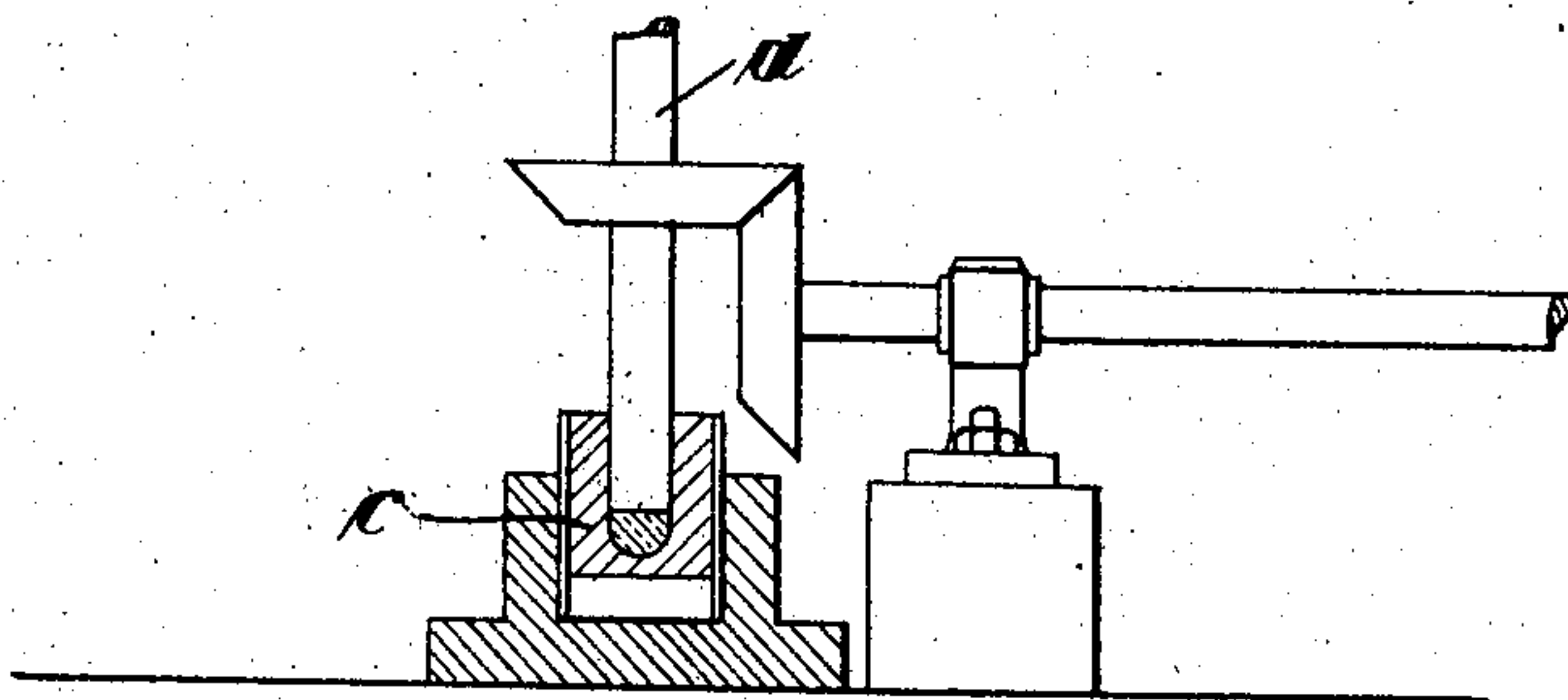
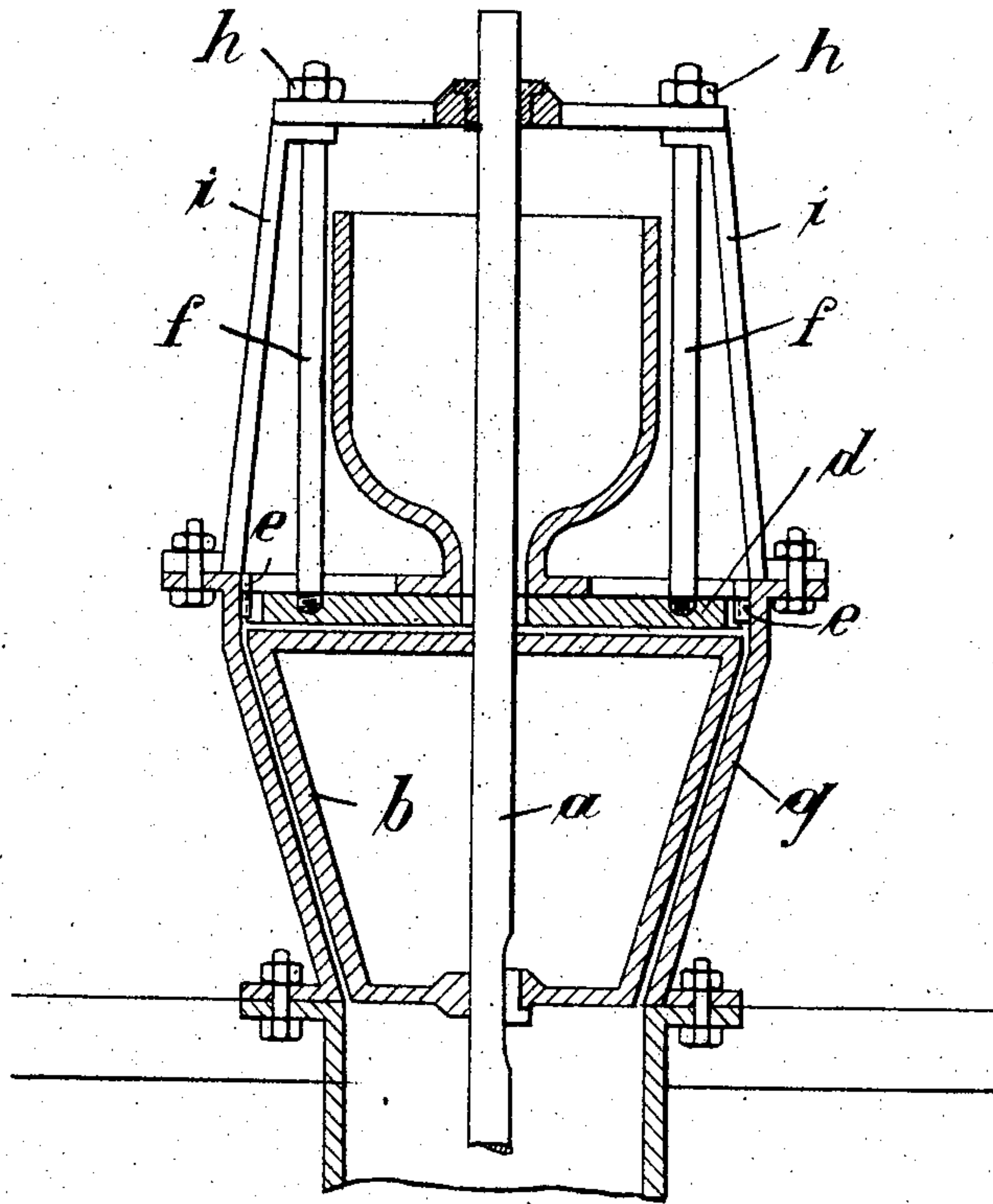


No. 835,049.

PATENTED NOV. 6, 1906.

G. WEISS.
GRINDING OR CRUSHING MILL.
APPLICATION FILED JAN. 25, 1906.



Witnesses:
Wilhelm Gshawor.
Heinr. Lautkenau

Inventor:
Gottlieb Weiss
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UNITED STATES PATENT OFFICE.

GOTTLIEB WEISS, OF SCHONNEBECK, GERMANY.

GRINDING OR CRUSHING MILL.

No. 835,049.

Specification of Letters Patent.

Patented Nov. 6, 1906.

Application filed January 25, 1906. Serial No. 297,877.

To all whom it may concern:

Be it known that I, GOTTLIEB WEISS, a subject of the German Emperor, and a resident of Schonnebeck, Essen district, Germany, have invented new and useful Improvements in Grinding or Crushing Mills, of which the following is a specification.

This invention relates to a grinding or crushing mill which is distinct from hitherto-known mills in that the runner, which is made of cast-steel, as well as the base-plate of the charging-funnel, are arranged adjustably, while runner and bucket are conically shaped, so that in order to adjust the runner only a slight turning of the bottom bearing is necessary, whereby the space between runner and bucket can be enlarged or lessened, respectively.

The accompanying drawing, which is a longitudinal central section through the mill, shows how this is accomplished.

The runner *b*, which is made of cast-steel and firmly keyed on the axle *a*, rests by means of the latter in the screw-threaded bottom bearing *c*, so that by simply turning the latter in its correspondingly screw-threaded socket the runner *b* can be adjusted in its vertical direction. Instead of the screw-threaded bottom bearing *c* any other suitable adjusting device may be used. Now the adjustment of the runner *b* makes, of course, also an adjustment of the base-plate *d* of the charging-funnel of the mill necessary, which in order to be prevented from turning is provided with grooves into which catch projections *e* of the bucket *g*. In order to allow of the base-plate *d* being adjusted, the same is freely suspended from screw-bolts *f*, which are fixed, by means of their nuts *h*, to

the frame *i*, carrying the top bearing of the axle *a*. By screwing these nuts *h* to the right or left the base-plate *d* can be lowered or lifted, according to the lower or higher adjustment of the runner, respectively.

The mill may be used for any purpose, but is particularly applicable to use for crushing ore or the like.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

A grinding or crushing mill, comprising an axle *a*, a top bearing and an adjustable screw-threaded bottom bearing *c* for supporting said axle, a conical bucket *g* provided with projections *e*, a conical runner *b* made of cast-steel and disposed in said bucket and firmly keyed on said axle and adapted to be vertically adjusted on the bottom bearing *c* being turned, a frame *i* fixed to said bucket and adapted to support said top bearing of said axle, screw-bolts *f* passed through said frame *i*, and a charging-funnel with base-plate *d* provided with grooves into which catch said projections *e* of said bucket thus preventing the base-plate from turning and freely suspended from said screw-bolts *f* and thus adapted to be vertically adjusted by turning the nuts *h* of said screw-bolts, substantially as described and shown and for the purpose set forth.

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

GOTTLIEB WEISS.

Witnesses:

PETER LIEBER,
WILLIAM ESSENWEIN.