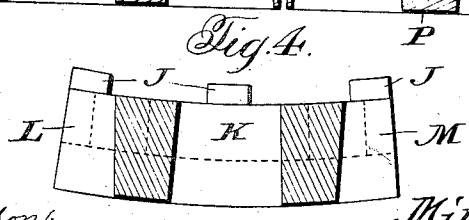
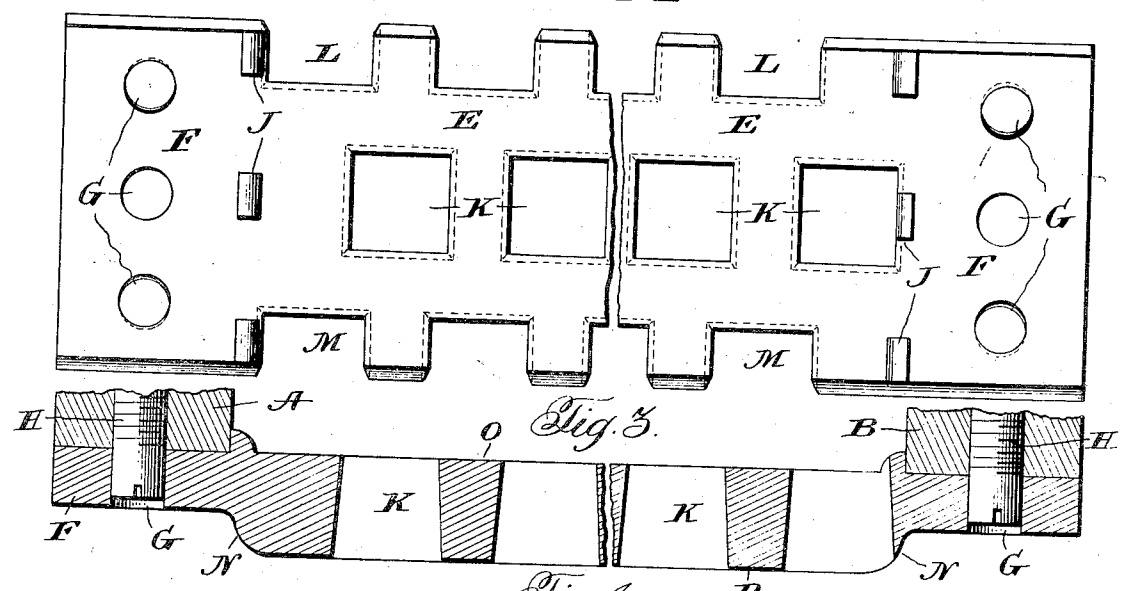
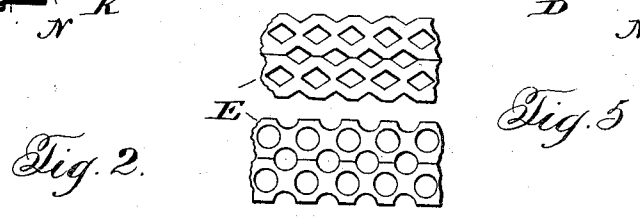
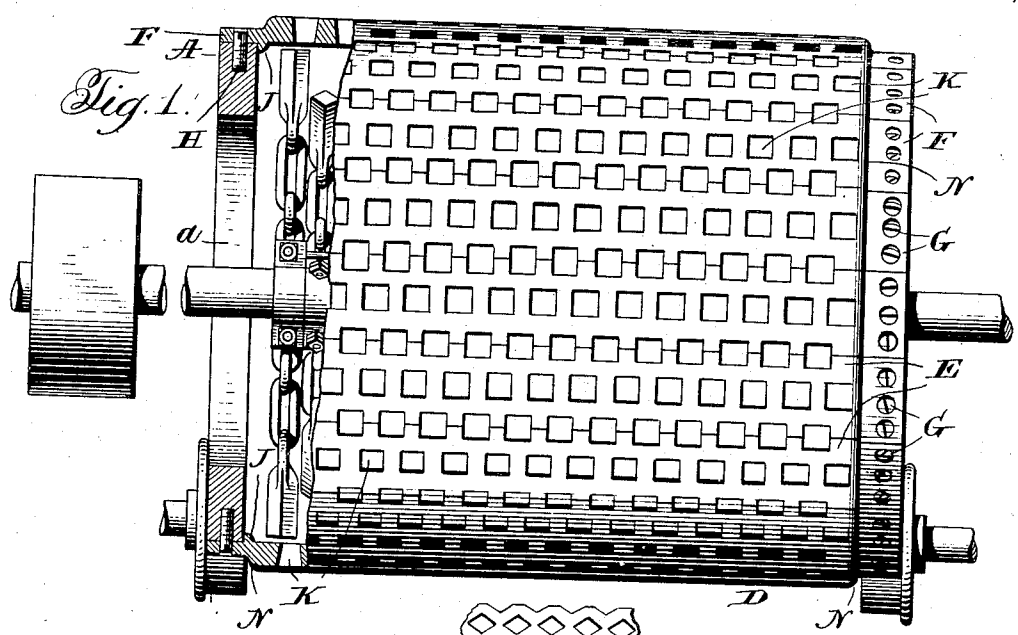


1,056,829.

Patented Mar. 25, 1913.



Witnesses:
Jas. C. Hutchinson
Charles Thomas

Inventor:
Mitts Quenner,
By T. Macmillan, Attorneys.

UNITED STATES PATENT OFFICE.

MITTS QUENNER, OF NOGALES, ARIZONA, ASSIGNOR TO QUENNER DRY CRUSHER COMPANY, OF DOUGLAS, ARIZONA, A CORPORATION OF ARIZONA.

GRIZZLY.

1,056,829.

Specification of Letters Patent.

Patented Mar. 25, 1913.

Application filed January 24, 1911. Serial No. 604,404.

To all whom it may concern:

Be it known that I, MITTS QUENNER, a citizen of the United States, residing at Nogales, in the county of Santa Cruz and State of Arizona, have invented certain new and useful Improvements in Grizzlies, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to improvements in grizzlies, and more particularly grizzlies of the rotary type designed for use either alone or in connection with other cooperating instrumentalities to treat material there-within and to discharge the material in desired size through the peripheral portion of the grizzly.

The invention has for its primary object the provision of a plurality of series of interchangeable metallic sections adapted to be removable to constitute the peripheral portion of the grizzly, the sections of each series being formed wholly or in part with discharge passages of a predetermined size so that when assembled the grizzly will have approximately throughout the extent thereof a multitude of discharge passages of the same size. The series are interchangeable to render the grizzly adjustable so far as the size of the discharge openings referred to are concerned.

A convenient embodiment of the invention comprises a grizzly having opposite end portions and a peripheral portion composed of a plurality of juxtaposed sections, each section being removably connected to the end portions and possessing an intermediate series of discharge openings and marginal portions adapted to cooperate with similar marginal portions on adjacent sections to constitute additional series of similar openings.

The details of the invention will be apparent from the specific description hereinafter contained when read in connection with the accompanying drawings forming part hereof and wherein the preferred embodiment of the invention is illustrated.

In the drawings: Figure 1 is a side view of a grizzly made in keeping with the present improvements, Fig. 2 is an elevation of one of the peripheral sections of the grizzly removed, Fig. 3 is a longitudinal sectional view of the same, showing the immediately associated parts of the ends of the grizzly,

Fig. 4 is a transverse sectional view of the same, and, Fig. 5 is a fragmentary view representing a plurality of interchangeable sections each differing from the other in character or size of the discharge openings formed therein.

Referring more specifically to the drawings wherein like reference characters designate the same parts in the several views, A—B, represent the opposite ends or heads of the grizzly, the former being provided with an inlet *a*. Conveniently the grizzly has on the interior thereof a series of breakers not necessary to be herein specifically described, suitable means being provided to relatively rotate the grizzly and beaters, as desired.

The periphery D of the grizzly is formed of a series of flat metallic sections E curved transversely to correspond to the circular formation of the ends A and B and provided with opposite end flanges F, apertured as at G to accommodate removable fastening bolts H detachably securing the sections to the ends. Inwardly extending lugs J adapted to abut against the inner faces of the ends serve to reinforce the ends and maintain the sections in properly alined positions.

K represents what I may term an intermediate series of discharge openings formed in each section, the same in this instance being shown of approximately square outline, and L—M, represent what may be styled partial outlet openings, the same being of approximately half the size of the openings K of the intermediate series so that when adjoining sections are brought together they cooperate to form openings of the same size as said intermediate series. To render the sections as strong as possible, while enabling close proximity of the discharge openings, the cutaway portions are arranged in staggered relation, as shown. That portion of the section between the securing end flanges F is materially thickened in an outward direction, as at N, to give the proper rigidity and strength to the sections.

The discharge openings are tapered outwardly from the inner face O of the section to the outer face P thereof so that while the size of the opening at the inside of the section determines the size of the material permitted to escape from the grizzly, the outwardly enlarging character of the opening permits the escaping material to spread or

become free and thus be easily discharged to prevent clogging.

By reference to Fig. 5 it will be appreciated that the discharge openings need not necessarily be square in outline, but may be of other contour, as may be found expedient or desirable. It will also be seen that a plurality of series of sections may be provided for use in connection with one machine, the sections of all series being of approximately the same size and having a like arrangement of fastening bolt openings so that they may be readily interchangeable, one series for the other, the several series differing primarily from each other in the size of the openings formed in or to be formed by the same. In this manner the treatment of the material within the grizzly may be regulated to effect a discharge of the material only when it obtains a size approximately corresponding to the size of the exit opening.

While I have herein shown the preferred embodiment of the invention, it will be apparent to those skilled in the art that the invention is capable of embodiment in other forms and devices than that illustrated.

I claim:—

A grizzly of the character described

comprising oppositely disposed heads, and a separating portion mounted upon said heads comprising a plurality of juxtaposed integrally formed sections, each extending continuously from head to head and secured to the latter and having an intermediate series of completely inclosed discharge openings, marginal cut away portions cooperating with adjoining cut-away portions of adjacent sections to form additional series of similar discharge openings, said openings being of substantially the same relative size and the series of openings being substantially uniformly spaced apart circumferentially of the cylinder, the cylinder being substantially smooth on its inner surface and each section being provided with depending lugs engaging the inner surfaces of the heads, and outwardly extending end portions carrying the lugs on their inner surfaces and in turn resting upon the periphery of the heads.

In testimony whereof I affix my signature in presence of two witnesses.

MITTS QUENNER.

Witnesses:

D. A. RICHARDSON,
FRANK W. DOAN.