

No. 846,483.

J. H. LEGGETT.
GOLD SAVING APPARATUS.
APPLICATION FILED DEC. 14, 1905.

PATENTED MAR. 12, 1907.

3 SHEETS—SHEET 1.

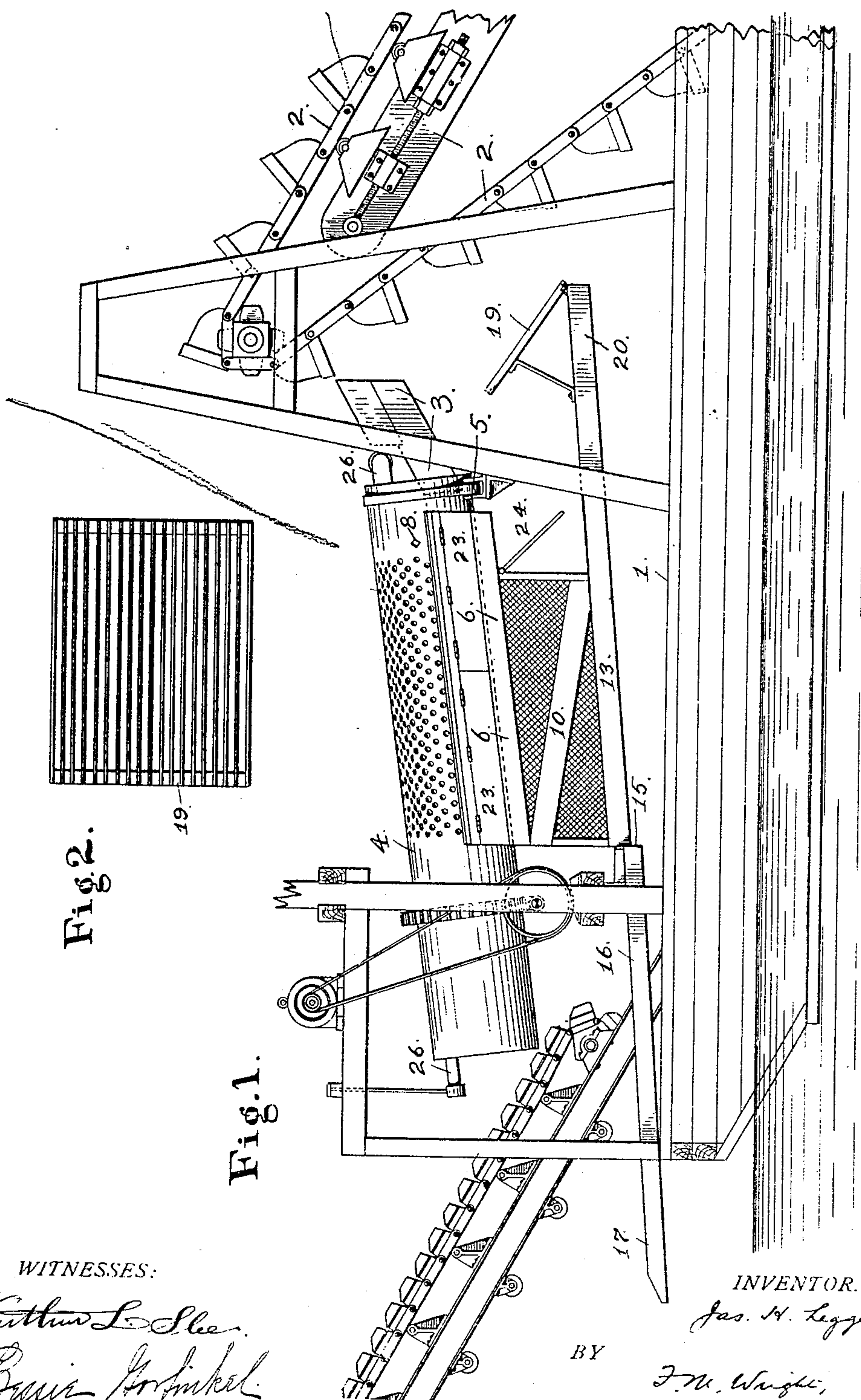


Fig. 2.

Fig. 1.

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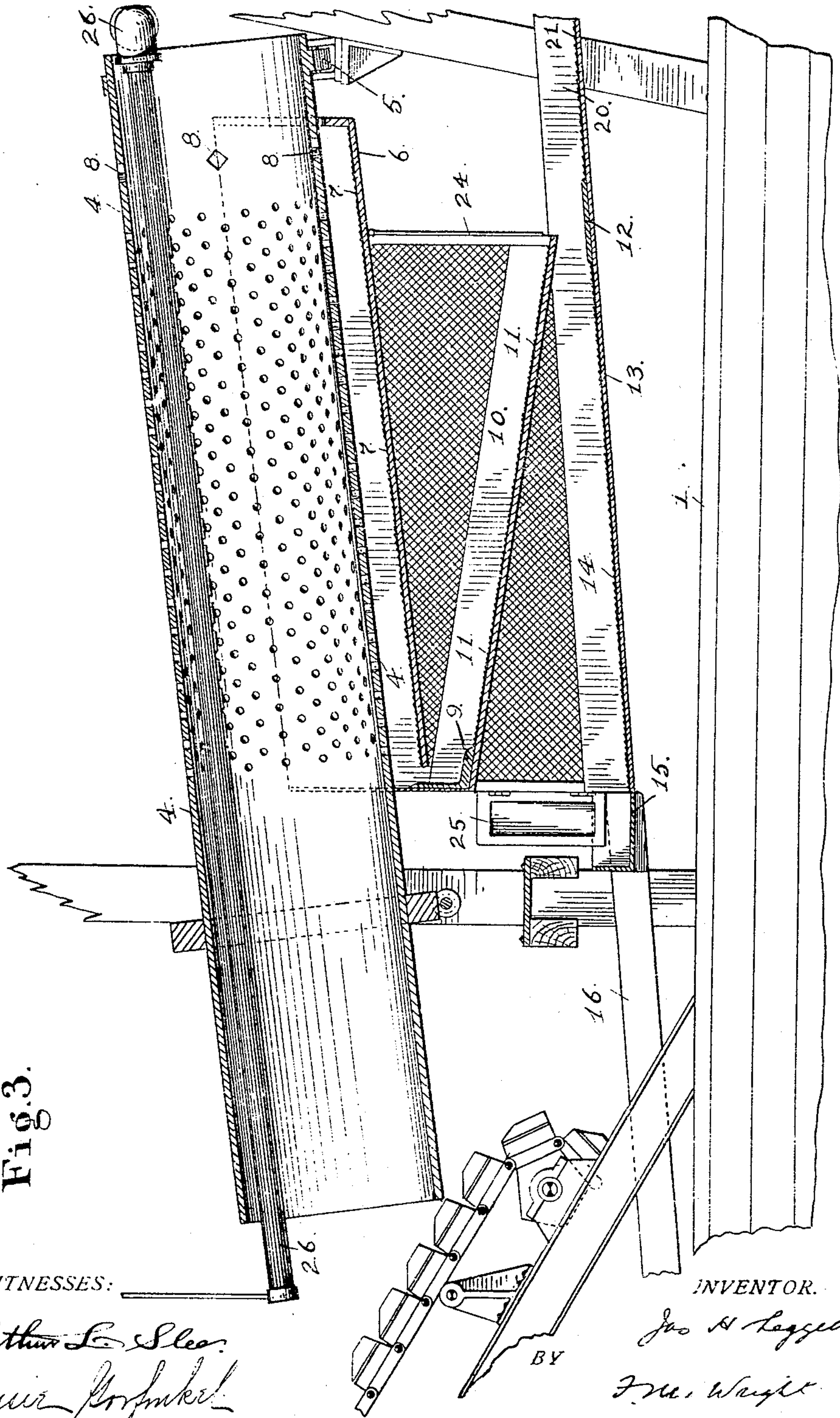


Fig. 3.

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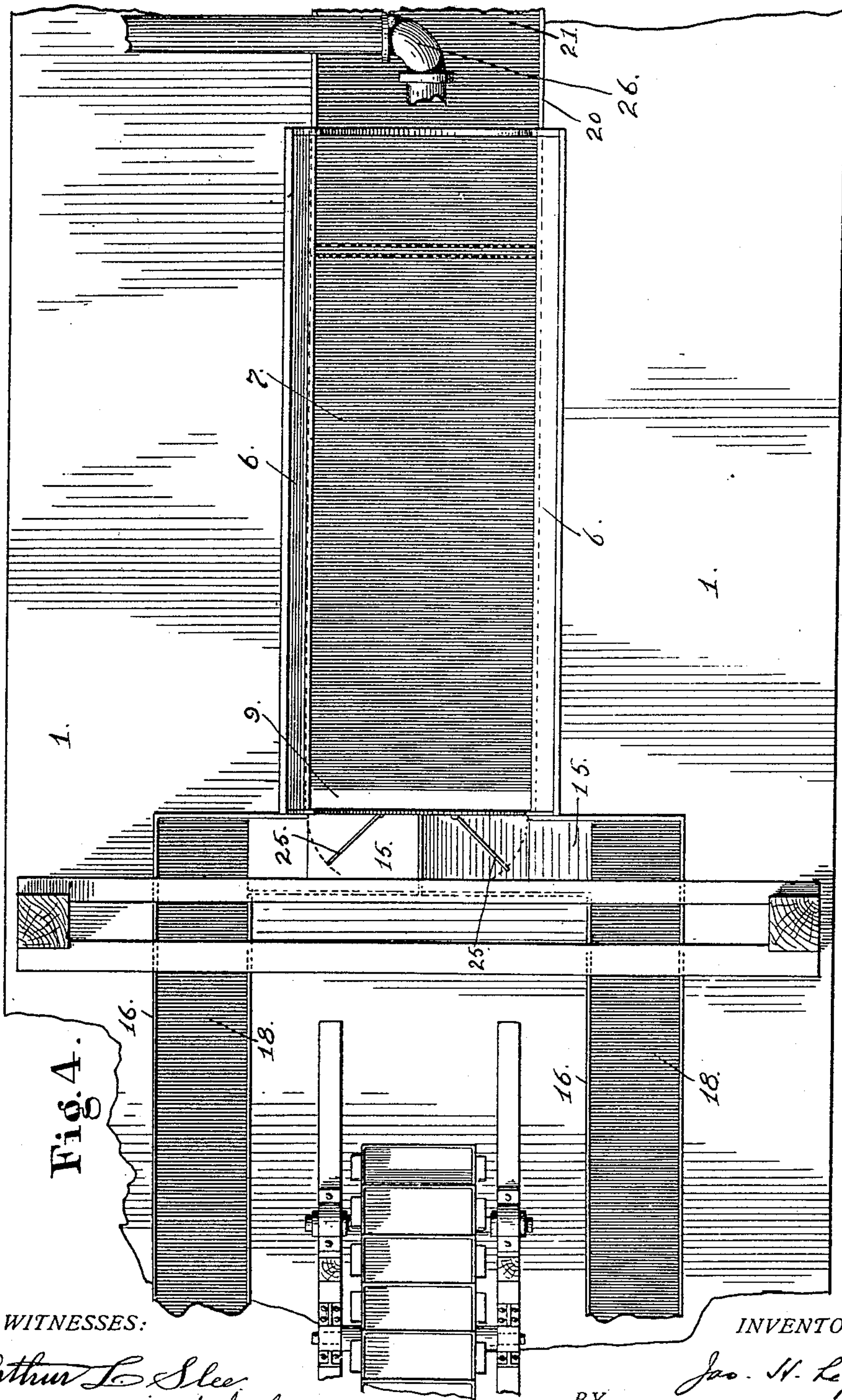
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3 SHEETS—SHEET 3.



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UNITED STATES PATENT OFFICE.

JAMES H. LEGGETT, OF OROVILLE, CALIFORNIA.

GOLD-SAVING APPARATUS.

No. 846,483.

Specification of Letters Patent.

Patented March 12, 1907.

Application filed December 14, 1905. Serial No. 291,734.

To all whom it may concern:

Be it known that I, JAMES H. LEGGETT, a citizen of the United States, residing at Oroville, in the county of Butte and State of California, have invented certain new and useful Improvements in Gold-Saving Apparatus, of which the following is a specification.

This invention relates to improvements in gold-saving apparatus used on dredges.

The object of the invention is to provide an apparatus of this character which for a given size of dredge will furnish a larger extent of surface for the material to pass over, will deliver the material much nearer to the stern of the dredge, thus avoiding the use of long side flumes, and will occupy less room than heretofore without interfering with the operation of the stone-stacker.

A further object of the invention is to provide an apparatus which will be more effective in saving the fine gold.

In the accompanying drawings, Figure 1 is a broken side elevation of a dredge equipped with my improvement. Fig. 2 is a plan view of a grizzly used in connection therewith. Fig. 3 is an enlarged longitudinal section of a portion of the apparatus. Fig. 4 is an enlarged broken plan view of the apparatus.

Referring to the drawings, 1 represents the body of the dredge provided with the usual digging-buckets and bucket-elevator 2, the buckets discharging into a delivery-chute 3, which chute discharges the material into a perforated screen 4, which may be either a revolving or a shaking screen, but in this case is shown as revolving on rollers 5. From said revolving screen the material drops onto the upper pan 6, provided with riffles 7. In order to render the riffles more effective in saving the fine gold, at the upper end of the revolving screen are formed a suitable number of holes 8, about two inches square or larger according to the conditions, through which holes a sufficient number of small rocks can drop onto the tables to find their way into the riffles, and thus keep said riffles always supplied with rock, and as these small rocks pass over the riffles they tap the same, and thus help the gold to find its way to the bottom of the riffles. The material falling down the upper pan 6 impinges against a wearing-plate 9 and then falls upon a second or lower pan 10 underneath the first pan and inclined downwardly in the opposite direction to said upper pan. This second pan is likewise supplied with riffles 11. The

material then falls from said second pan onto a wearing-plate 12 and thence to a bottom pan 13, likewise supplied with riffles 14, from which it falls onto a cross-flume 15, leading to the side flumes 16, which have extensions 17 over the stern of the dredge. Said flumes 16 and their extensions 17 likewise have riffles 18 thereon. The material which does not pass through the perforations in the screen is carried to the elevator-buckets, which discharge it over the stern of the dredge. Any material dropping from the digging-buckets which does not fall into the delivery-chute will fall onto a grizzly 19, by which the rocks are separated from the finer material, said rocks being dumped into the water, while the finer material falls onto a flume 20, having riffles 21, and discharging into the upper end of the pan 13.

The several pans are closed by doors 23 24 25. Water is supplied to the screen by a water-pipe 26.

I claim—

1. In an apparatus of the character described, the combination of a bucket-ladder and digging-buckets, a movable screen for screening the material raised by said buckets, a pan beneath said screen, a grizzly located beneath the upper end of the bucket-ladder and adapted to catch the material discharged from the buckets and not reaching the screen, and a flume beneath the grizzly and connected with the pan beneath the screen, substantially as described.

2. In an apparatus of the character described, the combination of a bucket-ladder and digging-buckets, a movable screen for screening the material raised by said buckets, a pan beneath said screen, a grizzly located beneath the upper end of the bucket-ladder and adapted to catch the material discharged from the buckets and not reaching the screen, and a flume beneath the grizzly having riffles and connected with the pan beneath the screen, substantially as described.

3. In an apparatus of the character described, the combination of a bucket-ladder and digging-buckets, a movable screen for screening the material raised by said buckets, a vertical series of pans beneath said screen, a grizzly located beneath the upper end of the bucket-ladder and adapted to catch the material discharged from the buckets and not reaching the screen, and a flume beneath the grizzly and connected with one of said pans, substantially as described.

4. In an apparatus of the character described, the combination of a bucket-ladder and digging-buckets, a movable screen for screening the material raised by said buckets, a vertical series of pans beneath said screen, a grizzly located beneath the upper end of the bucket-ladder and adapted to catch the material discharged from the buckets and not reaching the screen, and a flume
10 beneath the grizzly and provided with riffles, and connected with one of said pans, substantially as described.

5. In an apparatus of the character described, the combination, with digging-buckets, of a movable cylindrical screen for screen-
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ing the material raised by said buckets, and a pan beneath the screen for saving the fine gold, said screen being provided at its upper end with a number of holes adapted to permit a suitable number of comparatively
20 large rocks to fall therethrough into the said pan to assist in saving the gold, substantially as described.

In witness whereof I have hereunto set my hand in the presence of two subscribing witnesses.
25

JAMES H. LEGGETT.

Witnesses:

MINNIE A. WELLS,
CARLETON GRAY.