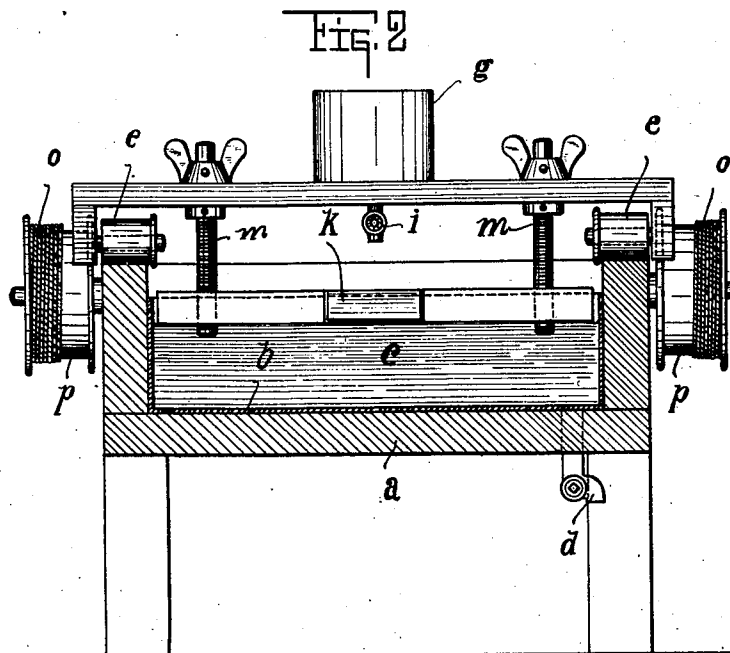
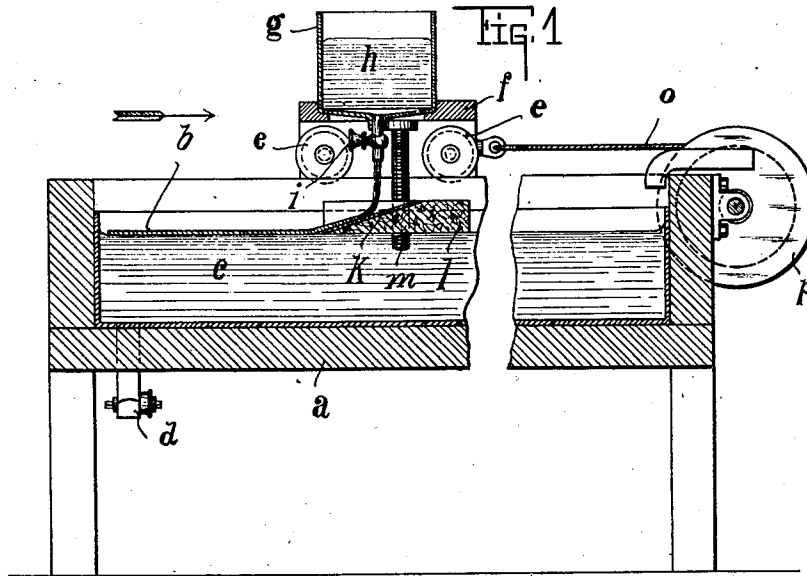


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 APPARATUS FOR MANUFACTURING LEAF METAL AND THE LIKE.
 APPLICATION FILED FEB. 10, 1909.

946,676.

Patented Jan. 18, 1910.



Witnesses

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UNITED STATES PATENT OFFICE.

LEONHARD KURZ, OF FUERTH, GERMANY.

APPARATUS FOR MANUFACTURING LEAF METAL AND THE LIKE.

946,676.

Specification of Letters Patent.

Patented Jan. 18, 1910.

Application filed February 10, 1909. Serial No. 477,205.

To all whom it may concern:

Be it known that I, LEONHARD KURZ, residing at Fuerth, Germany, (whose post-office address is No. 6 Pfisterstrasse, Fuerth, Bavaria, Germany,) have invented certain new and useful Improvements in Apparatus for Manufacturing Leaf Metal and the Like, more Particularly Leaf-Gold; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to the manufacture of leaf-metal and the like, more particularly of leaf-gold, the object of the invention being to provide a special apparatus for the formation of the leaves.

The apparatus I prefer to use for the formation of the leaves is illustrated by way of example, in the accompanying drawing, Figure 1 being a front sectional elevation and Fig. 2 a side sectional elevation thereof.

The apparatus comprises a wooden receptacle *a*, provided with a metallic lining *b*, and filled with a fixed quantity of water *c*, a tap, *d*, being also provided thereon for the discharge of the water. A receptacle *g* provided with a tap *i*, and containing the solution above referred to mixed up with the bronze or color is supported on a carriage *f*, extending over the whole width of the receptacle *a* and running by means of rollers *e* on two opposite and parallel sides thereof. A transverse beam *l*, preferably of cork or wood touching with its lower end the surface of the water and sliding thereon inside the mixture container and is provided with an inclined surface covered by a zinc plate upon which runs the mixture delivered by the tap *i*. The beam *l* is connected with the carriage *f* by means of screw bolts *m*, permitting said beam to be adjusted according to the height of the water in the receptacle *a*. The carriage *f* is moved on the upper side of the water receptacle in the direction of the arrow by means of a hauling rope *o* and drum *p*.

The apparatus is operated in the following manner: Assuming the carriage *f* is, in Fig. 1, at the left hand side of the box *a*, the mixture is poured into the receptacle *g*, and simultaneously with the tap *i* being opened, the carriage is moved at the desired speed to

the right, viz: toward the hauling drum *p*. While the carriage is being moved, the mixture *h* runs upon and down the inclined zinc surface *k*, and after reaching the water surface it spreads over the latter thereby forming a floating film. Any thickness may be imparted to this film by suitably regulating the speed at which the carriage is moved. After the film has become solid, it is lifted off from the water surface by suitable means and is then dried and polished or rendered smooth, the leaf-gold or leaf-metal being thus completely finished.

Instead of the water surface, a mercury, glass or any other suitable plane surface may be used for the purpose of receiving the film formed by the mixture.

The leaves may be made more or less thick or extremely thin by varying the speed of movement of the carriage.

What I claim and desire to secure by Letters Patent is:

1. An apparatus for making leaf metal comprising in combination, a vat for holding a fluid supporting body, a carriage movably mounted on said vat, a metal receiving member disposed on said carriage and lying adjacent the surface of the supporting body and arranged to deliver thereon, means for adjustably suspending said receiving member below said carriage, a receptacle mounted on said carriage and delivering to said member, and means for moving said carriage along said vat, substantially as and for the purpose set forth.

2. An apparatus for making leaf metal comprising in combination, a vat for holding a fluid supporting body, a U-shaped carriage member spanning the vat and provided with rollers running along the walls thereof, a tank on said carriage member provided with a valved outlet discharging downwardly and a horizontally disposed receiving bar provided with an inclined receiving surface, adjustable means for suspending said bar beneath said member and adjacent the surface of the supporting body, and means for moving said carriage along said vat, substantially as and for the purpose set forth.

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

LEONHARD KURZ.

Witnesses:

ALESANDER WIELE,
MAX SCHNEIDER.