J. SINNING & P. A. DE LANGE.

CLAMP.

APPLICATION FILED JULY 18, 1908.

925,603. Patented June 22, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

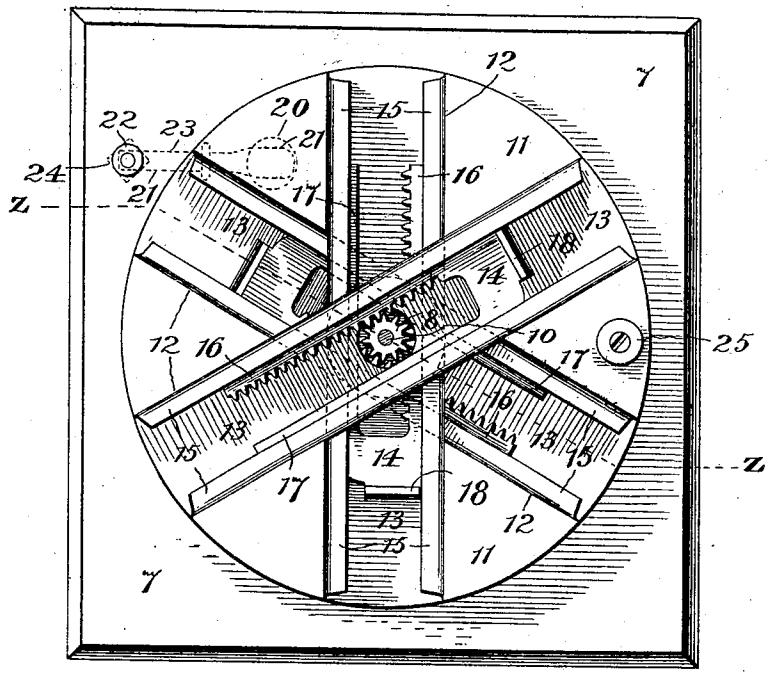
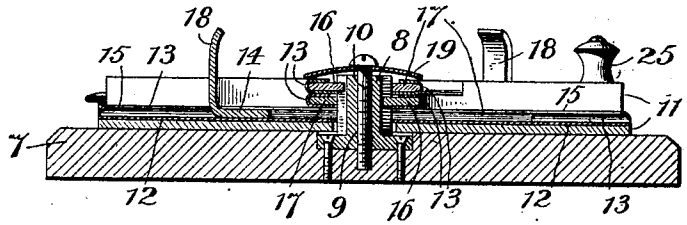


Fig. 2.



Witnesses:

Jas. E. Hutchinson.

Thos. R. Heath.

Inventors

Peter A. de Lange,

John Sinning,

By Jno. R. Morris, Attorney.

THE NORRIS PETERS CO., WASHINGTON, D. C.

J. SINNING & P. A. DE LANGE.

CLAMP.

APPLICATION FILED JULY 18, 1908.

925,603.

Patented June 22, 1909.

2 SHEETS—SHEET 2.

Fig. 3.

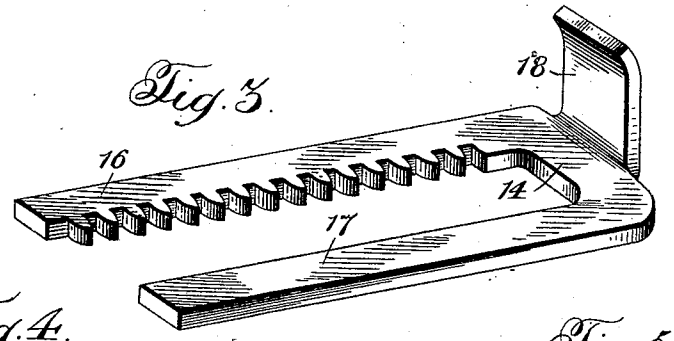


Fig. 4.

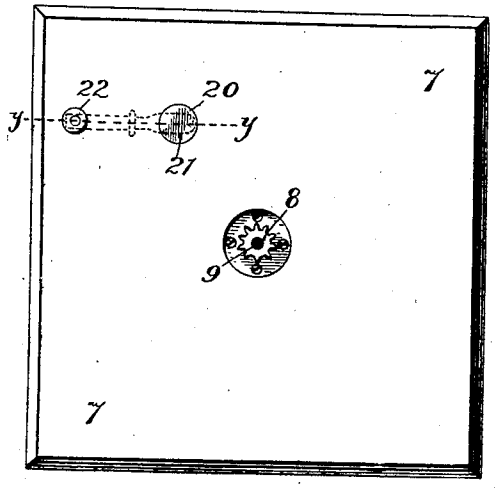


Fig. 5.

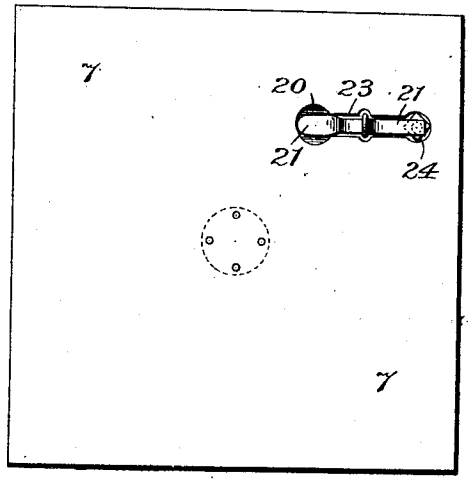
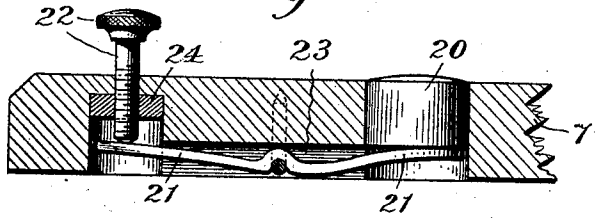


Fig. 6.



Witnesses:

Jas. E. Hutchinson.

Thos. P. Neath.

Inventors:

Peter A. de Lange

John Sinning

By Joel R. Morris, Attorney.

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN SINNING AND PETER A. DE LANGE, OF LENNOX, SOUTH DAKOTA.

CLAMP.

No. 925,603. Specification of Letters Patent. Patented June 22, 1909.

Application filed July 18, 1908. Serial No. 444,303.

To all whom it may concern:

Be it known that we, JOHN SINNING and PETER A. DE LANGE, citizens of the United States, residing at Lennox, in the county of Lincoln and State of South Dakota, have invented certain new and useful Improvements in Clamps; and we 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 is designed to afford means whereby mortars and other receptacles or objects may be easily and quickly clamped for being securely held in place during use and whereby they may be just as readily released when desired, it being an object to provide a device of this character whose construction is simple and whose operation is effective and entails little exertion.

When read in connection with the description herein, the details of construction and arrangement of parts contemplated by this invention will be apparent from the accompanying drawings, forming part hereof, wherein a preferable embodiment of the invention is disclosed, for purpose of illustration.

Like reference-characters refer to corresponding parts in the several views of the drawings, of which—

Figure 1 is a plan view; Fig. 2 is a sectional view on the line *z*—*z*, Fig. 1; Fig. 3 is a view of one of the clamp-slides; Fig. 4 is a plan view of the fixed member of the device; Fig. 5 is a bottom view thereof; and Fig. 6 is a sectional view on the line *y*—*y*, Fig. 4.

Having more particular reference to the drawings, 7 designates a supporting member, which may be secured to, or be a part of, a table, counter, or the like. Attached to and projecting upwardly from this support is a fixed pinion 8, having an aperture 9 therethrough for passage of a pivot 10, the pivot extending into the support.

Disposed on support 7 is a rotatable member 11, having pinion 8 as its pivot. A plurality of grooves 12 are formed in member 11. The bottom surface of every groove lies in a different plane from that of the others, and the grooves are disposed in the lines of different diameters of a circle of which pinion 8 would be the center. Located in each groove is a guideway 13, the guideways being independent of each other, crossing one above another at the pinion, and having alined apertures to accommodate the pinion and permit it to project through all of them. A clamp-slide 14 is positioned and longitudinally movable in each guideway, the slide being held therein by an overlapping flange 15 on each side. The slide is formed with parallel arms 16 and 17 of a distance apart to permit disposition one on each side of the pinion, and one of the arms, for instance 16, is toothed and arranged to mesh with the pinion. The toothed arms of the slides are so correlated that, when member 11 is rotated, all of them will move either toward or from the pinion at the same time and will simultaneously and mutually coöperate to clamp or release an object. At the outer end of each slide is a clamp-projection 18. Member 11 is held down in place by a head 19 on pivot 10, the head overlapping the top guideway.

A movable friction element 20 is seated in an aperture or recess in support 7 beneath, and arranged for frictional engagement with, the bottom of member 11, whereby said member may be held in any desired position of rotation. Element 20 engages an arm 21 at or near an end thereof, the arm being pivoted intermediate its ends, and a thumb-screw 22 engages the arm at or near its other end. Arm 21 is preferably disposed in a groove 23 formed in the bottom of support 7. Thumb-screw 22 is held by a threaded sleeve 24 which is fixed in or to the support, and its head projects above the support and outside of the limits of member 11, where it is accessible and where it does not interfere with the rotation of that member.

A knob or other suitable projection 25 is secured to member 11 where it can be conveniently grasped by the hand for rotating the member.

When it is desired to clamp or release an object which has been placed on member 11 between the projections 18, member 11 is rotated in a proper direction, when the slides in engagement with the fixed pinion will be moved to cause the projections to move inwardly against or outwardly from the object, as the case may be. By operation of thumb-screw 22 friction element 19 is caused to engage member 11 to prevent its rotation and release of the clamp or to disengage it to permit its rotation, as desired.

Having thus described our invention, what

we claim as new, and desire to secure by Letters Patent, is—

1. A clamp comprising a rotatable carrying member, a plurality of guideways thereon, a fixed pinion projecting through said guideways, and clamp-slides in said guideways in mesh with said pinion, said slides being arranged to all be moved at the same time inwardly or outwardly upon rotation of said member.

2. A clamp comprising a rotatable carrying member, a plurality of guideways thereon, a fixed pinion projecting through said guideways, clamp-slides in said guideways in mesh with said pinion, said slides being arranged to all be moved at the same time inwardly or outwardly upon rotation of said member, and means whereby rotation of said member is controlled.

3. A clamp comprising a supporting member, a fixed pinion thereon, a rotatable member having independent guideways through which said pinion projects, and clamp-slides in said guideways in mesh with said pinion and arranged to clamp or release an object upon rotation of said rotatable member.

In testimony whereof we affix our signatures, in the presence of two witnesses.

JOHN SINNING.
PETER A. DE LANGE.

Witnesses:
M. N. CROWLEY,
J. P. HEURICH.