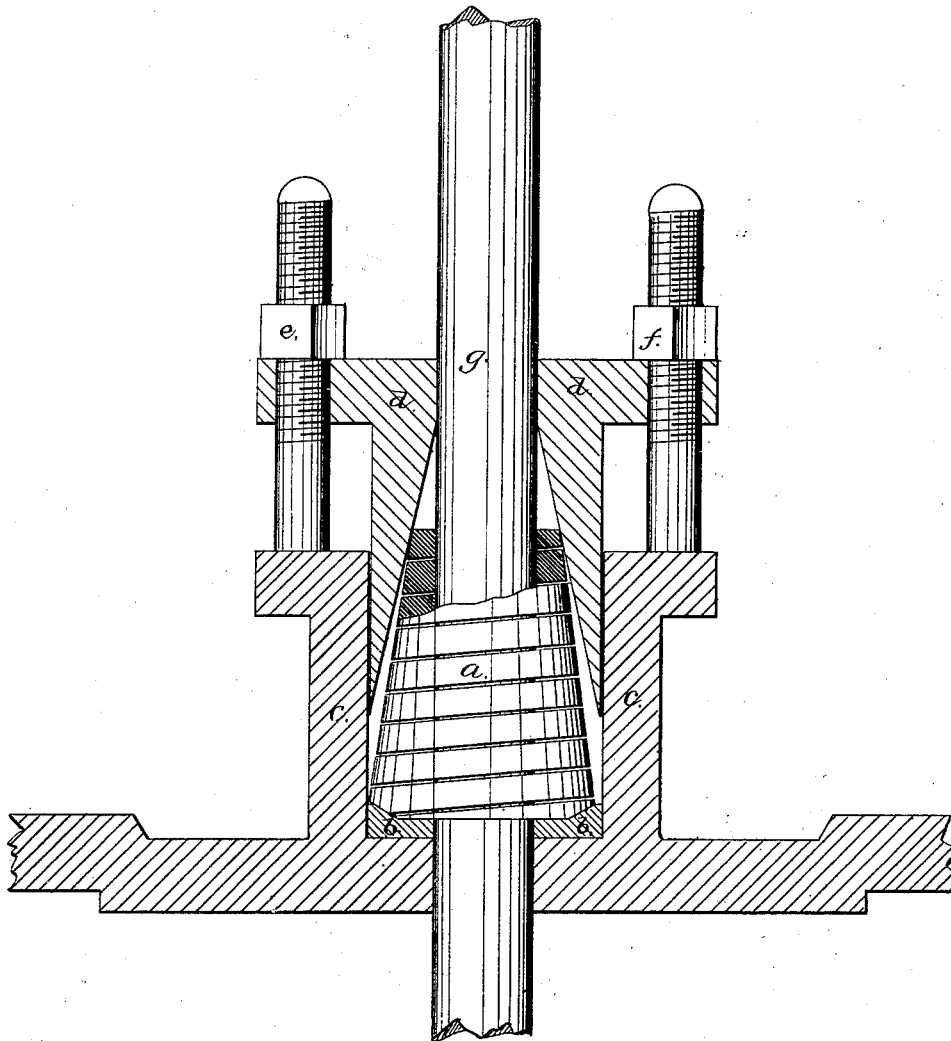


P. SAGE.

Metallic Packing for Stuffing-Boxes.

No. 168,344.

Patented Oct. 5, 1875.



Witnesses:
Geo. A. Tuford
Henry Lee Fulton

Inventor:
Philip Sage

UNITED STATES PATENT OFFICE.

PHILIP SAGE, OF DUBUQUE, IOWA.

IMPROVEMENT IN METALLIC PACKINGS FOR STUFFING-BOXES.

Specification forming part of Letters Patent No. **168,344**, dated October 5, 1875; application filed July 19, 1875.

To all whom it may concern:

Be it known that I, PHILIP SAGE, of Dubuque, State of Iowa, have invented an Improvement in Metallic Packing for Stuffing-Boxes, of which the following is a specification:

The object of my invention is to form a durable, easily adjustable, and perfectly steam-tight packing by the combination of a conical-shaped stuffing, made of any anti-friction metal, with the seat and follower in the common stuffing-box, as shown in section in the accompanying drawing.

a is the spiral cone, the conical base of which is fitted to the seat *b* in the bottom of the stuffing-box *c*. *d* is the follower, exactly fitted to the conical spire internally, and its outside to the stuffing-box *c*. This follower is kept in place by the bolts *e f*, which serve also to contract the spiral cone when neces-

sary, keeping it always steam-tight around the piston-rod *g*.

The spiral cone is formed after the hole is made for the piston, and the outside conical form is finished by cutting a screw-thread from end to end and from the circumference to the opening for the piston-rod, leaving it a conical spire or a spiral cone, perfectly flexible and adjustable to the piston-rod by the bolts through the follower.

I claim as my invention—

The anti-friction metallic conical spiral coil *a*, in combination with the seat *b* and follower, when constructed substantially as and for the purpose herein specified.

PHILIP SAGE.

Witnesses:

H. L. FULTON,
M. H. BEACH.