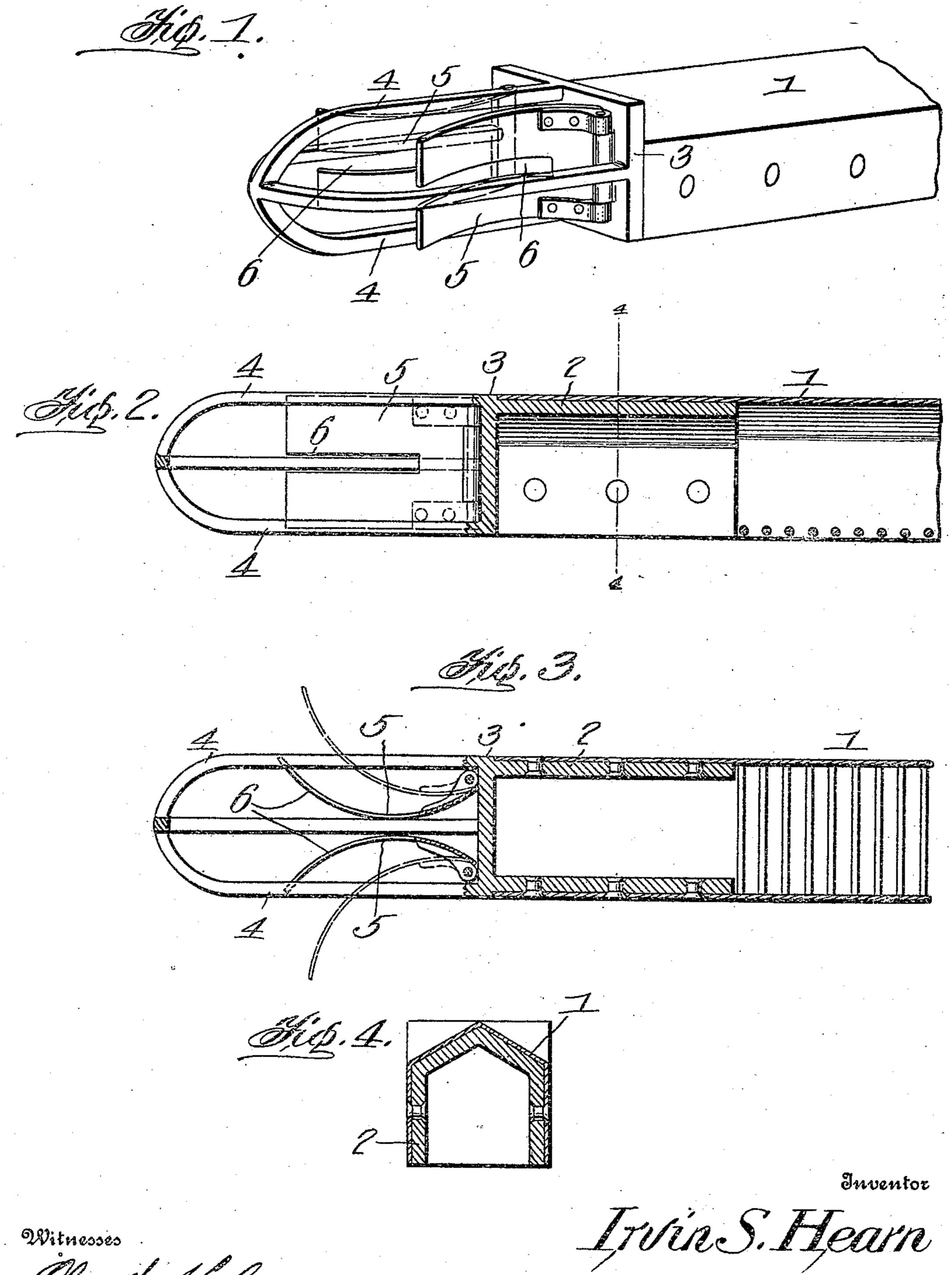
I. S. HEARN.

LEVELING BAR HEAD.

APPLICATION FILED AUG. 18, 1908.

928,603.

Patented July 20, 1909.



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UNITED STATES PATENT OFFICE.

IRVIN S. HEARN, OF JOHNSTOWN, PENNSYLVANIA.

LEVELING-BAR HEAD.

No. 928,603.

Specification of Letters Patent.

Patented July 20, 1909.

Application filed August 18, 1908. Serial No. 449,049.

To all whom it may concern:

Be it known that I, Irvin S. Hearn, a citizen of the United States, residing at Johnstown, in the county of Cambria and State of Pennsylvania, have invented a new and useful Improvement in Leveling-Bar Heads, of which the following is a specification.

This invention relates to a leveling bar head for the purpose of leveling down coal

10 in coke ovens.

The invention is essentially an attachment for the leveling bars now in use, which bars are usually from thirty five to forty feet in length and are run backward and forward through the chuck hole in the oven door by means of a rack and gear arrangement.

My invention consists of a head intended to be attached to the leveling bar now in use, and in illustrating my invention I have shown only the inner end portion of the lev-

eling bar.

In the accompanying drawings; Figure 1 is a perspective view of my invention applied to the bar. Fig. 2 is a vertical longitudinal section. Fig. 3 is a horizontal section. Fig. 4 is a transverse section on the line 4—4 of Fig. 2.

In these drawings 1 represents the ordinary leveling bar which is hollow and within this bar and riveted to it I fit an extension 2 being the same in cross section as the bar 1, and this extension carries a head 3 from which project two bows 4 arranged at right angles to each other and intersecting at their extreme outer ends. To the head 3 are hinged wings 5 which wings are longitu-

dinally slotted as shown at 6 in order to permit them to fold within a horizontally arranged bow 4 and to spread outwardly projecting laterally beyond said bow while in 40 use. These wings are folded and lie within the bows as the head is passed through the chuck hole and then automatically spread as the bar is run through the oven. The bows and wings spread the coal much more quickly 45 and uniformly than the usual form of leveling bar.

What I claim is:—

1. A leveling bar head having forwardly projecting intersecting bows, and hinged 50 wings foldable within said bows and adapted

to spread laterally when in use.

2. A leveling bar head comprising an extension rigidly secured to a leveling bar, forwardly projecting bows carried by said 55 head, the bows intersecting at their extreme outer ends and wings hinged to said head within the bows, and slotted longitudinally in order to swing laterally without the bows.

3. A leveling bar head having forwardly 60 projecting bows arranged at right angles to each other, and longitudinally slotted hinged wings, said wings being hinged to the head within the bows, and swinging laterally beyond the horizontally arranged bows, the 65 slots of the wings receiving said bows when the wings are spread apart as and for the purpose set forth.

IRVIN S. HEARN.

Witnesses:

N. V. WATERMAN, Amos Campbell.