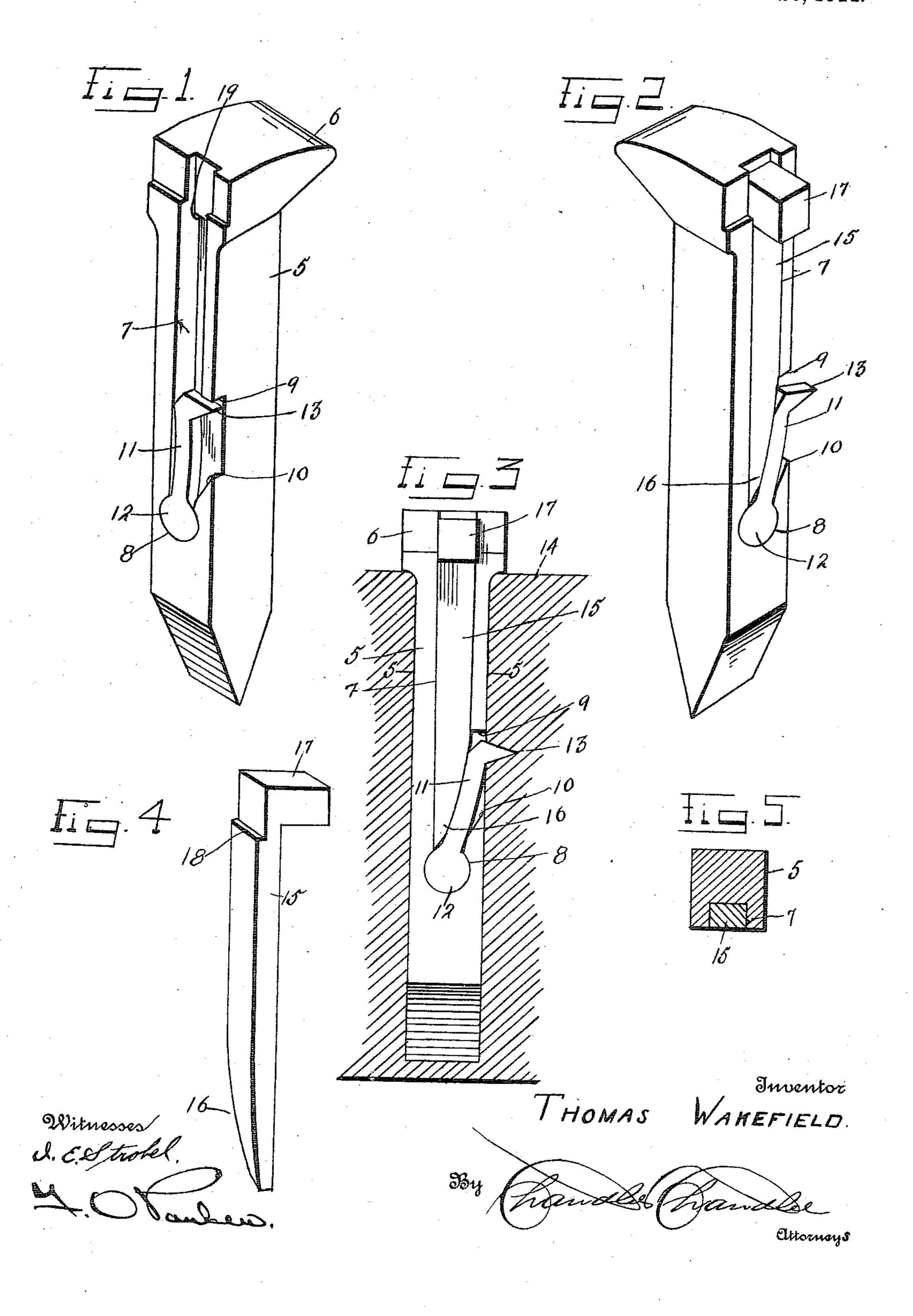
T. WAKEFIELD. RAILROAD SPIKE. APPLICATION FILED APR. 22, 1910.

995,503.

Patented June 20, 1911.



UNITED STATES PATENT OFFICE.

THOMAS WAKEFIELD, OF TAYLOR, ARIZONA TERRITORY.

RAILROAD-SPIKE.

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Specification of Letters Patent. Patented June 20, 1911.

Application filed April 22, 1910. Serial No. 556,960.

To all whom it may concern:

Be it known that I, Thomas Wakefield, a citizen of the United States, residing at Taylor, in the county of Navajo, Territory of Arizona, have invented certain new and useful Improvements in Railroad-Spikes; 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.

The invention relates to a railroad spike and more particularly to the class of locking

railway spikes.

The primary object of the invention is the provision of a spike with means whereby when the spike is driven home into a railway tie or bed it may be locked in position against accidental withdrawal or re-20 traction.

Another object of the invention is the provision of a railroad spike in which the body portion thereof contains a chamber in which is disposed a locking dog the latter being adapted to bite into the body of a tie after the spike has been driven into the said tie on the insertion of a wedging key so that the said spike will be held fast in the tie and against accidental withdrawal or retraction so as to obviate the possibility of the spikes becoming loose when in use.

A further object of the invention is the provision of a railroad spike which is thoroughly reliable and efficient in operation and one that may be manufactured at a mini-

mum cost.

In the drawings accompanying and forming part of this specification is illustrated the preferred form of embodiment of the invention which to enable those skilled in the art to carry the invention into practice will be set forth at length in the following description while the novelty of the invention will be pointed out in the claims suc-

45 ceeding the description.

In the drawings:—Figure 1 is a perspective elevation of a railway spike constructed in accordance with the invention. Fig. 2 is a further perspective elevation of a spike with the wedge key carried thereby and the locking dog in position for securing the spike in a tie. Fig. 3 is a vertical longitudinal sectional view through a portion of a railway tie with the spike mounted therein and in locked position. Fig. 4 is a detailed perspective view

of the wedging key. Fig. 5 is a transverse sectional view of the spike and key therein.

Similar reference characters indicate corresponding parts throughout the several 60

views in the drawings.

Referring to the drawings by numerals 5 designates the spike which in general outline may be of any well-known or approved construction. The spike 5 at its lower end 65 is pointed to permit it to be easily driven into a tie while its opposite end is formed with the usual head 6, and one face of this spike 5 is formed with a vertical channel or slot 7, the same opening at one end through 70 the head 6 while its opposite end terminates in a circular shaped terminal or recess 8 spaced a distance from the pointed lower end of the said spike. Opening through another side face of the spike 5 at right angles 75 to the face containing the slot 7 and communicating with the latter is an opening 9, the same being arranged near the recess 8 at the lower end of the said slot 7, one wall of the opening 9 being beveled as at 10 to 80 permit the free movement of a locking dog 11 the same being detachably fitted in the slot and is formed at one end with a circular shaped terminal 12, said terminal correspondingly shaped to the recess 8, and de- 85 tachably fitted therein to permit pivotal movement of the said locking dog. The remaining end of the locking dog is formed with a pointed hook bill 13, so that upon movement of the dog in one direction or 90 in other words toward the opening 9 the said bill 13 will protrude beyond the face through which the opening 9 opens so as to bite into the body of a tie 14 after the spike 5 has been driven home therein.

Insertible in the slot 7 is a key 15, said key being provided with a wedge shaped lower end 16 while its opposite upper end is formed with a head 17, and this key 15 is adapted to be inserted in the slot 7 so as to 100 effect the movement of the locking dog 11 to bring it into position for biting into the body of the tie 14 on driving home the spike 5 therein.

In driving the spike 5 an operator strikes 105 the head 6 thereof a sufficient number of blows to drive the pointed end of the spike 5 at a slight distance into the body of the tie 14 so that the slot 7 and the recess 8 are exposed, whereupon the locking dog 11 is positioned within the slot 7 and recess 8 so that its pointed bill 13 will not protrude

through the opening 9 in the spike, then the said spike is driven home into the tie 14 and thereafter the key 15 is inserted in the slot 7 and driven thereinto, so as to have its 5 lower wedge shaped end 16 act upon the locking dog 11 to move the same, whereby its pointed bill 13 will bite into the body of the tie 14 and thereby securing the spike 5 in the said tie against the accidental with-

10 drawal thereof or its retraction from the tie. The key 15 immediately below its head 17 at the inner face thereof is formed with a shoulder 18, said shoulder being adapted to engage with a shoulder 19 formed in the re-15 cess 7 of the spike 5, whereby the said key 15 when inserted in the recess 7 will be locked therein and will be prevented from accidental working upward in the spike 5.

What is claimed is:—

20 1. A spike having a vertical slot in one face thereof terminating in a circular shaped recess, a dog having a circular shaped end correspondingly shaped to the recess and detachably fitted in said slot and recess, the 25 said spike being further provided with an opening communicating with said slot through which the dog is adapted to move, and a wedge shaped pin insertible in the slot to operate upon the dog for moving it in 30 locked position, the spike being formed with

a shoulder near its upper end and said wedge-shaped pin being formed with a shoulder adapted to be locked to the shoulder of the spike.

2. A spike having a longitudinally dis- 35 posed slot in one face thereof, said slot being formed at its lower end with a circular enlargement and with a lateral portion opening through one side of the spike, a dog having an enlarged lower end pivoted 40 thereby in the enlarged end of the slot and provided with a pointed offset upper end adapted to be moved in the lateral portion of the slot and means for forcing the pointed offset end of the dog through the lateral por- 45 tion of the slot.

3. A spike having a longitudinal slot, a dog having an enlarged circular lower end pivoted thereby in the lower end of the slot and adapted to be moved laterally of the 50 spike thereto, an offset portion of said slot, and a wedge adapted to move in the slot and force the dog through the lateral portion of said slot.

In testimony whereof, I affix my signa- ⁵⁵ ture, in presence of two witnesses.

THOMAS WAKEFIELD.

Witnesses:

E. M. WAKEFIELD, ALICE HATCH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."