

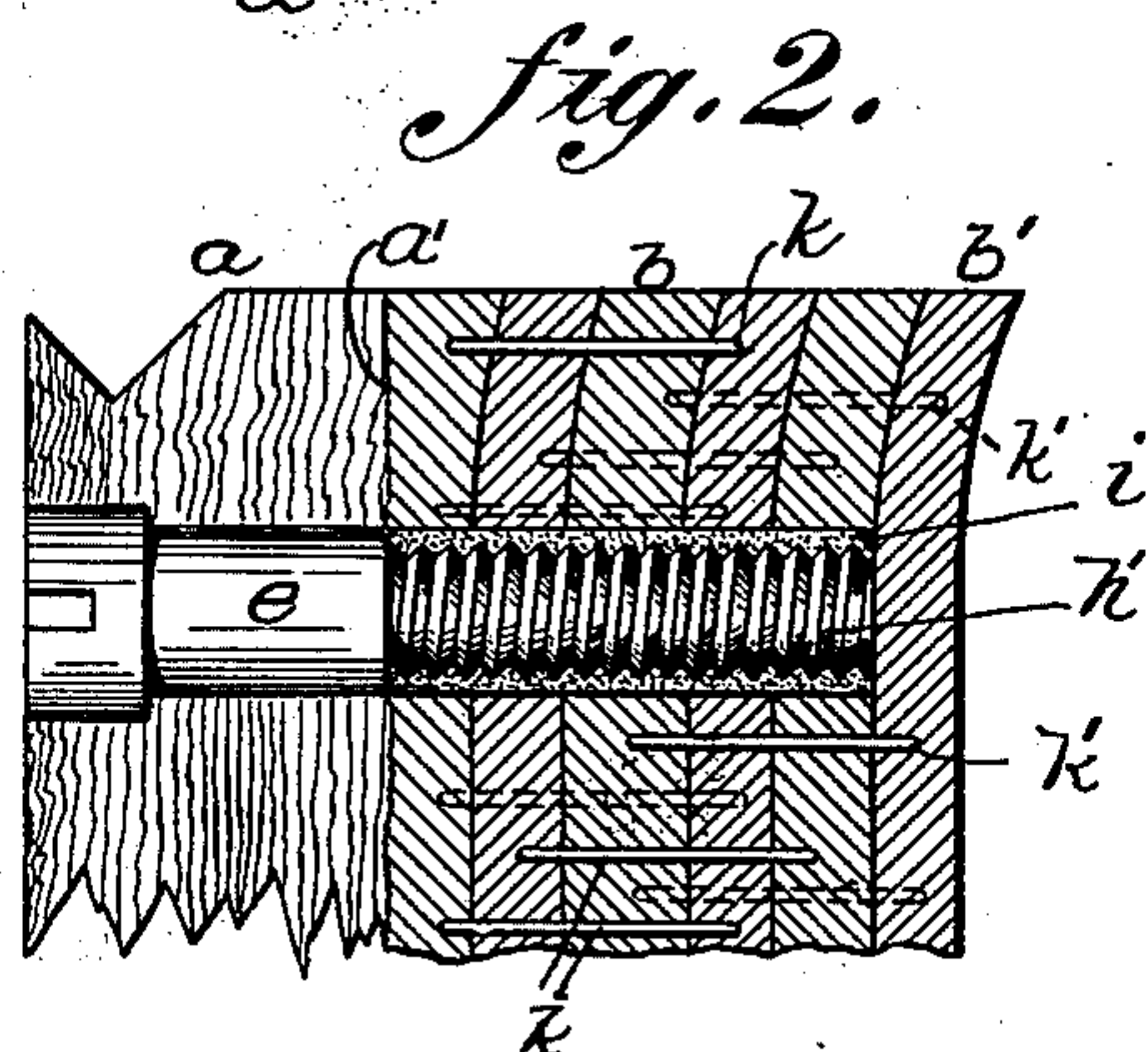
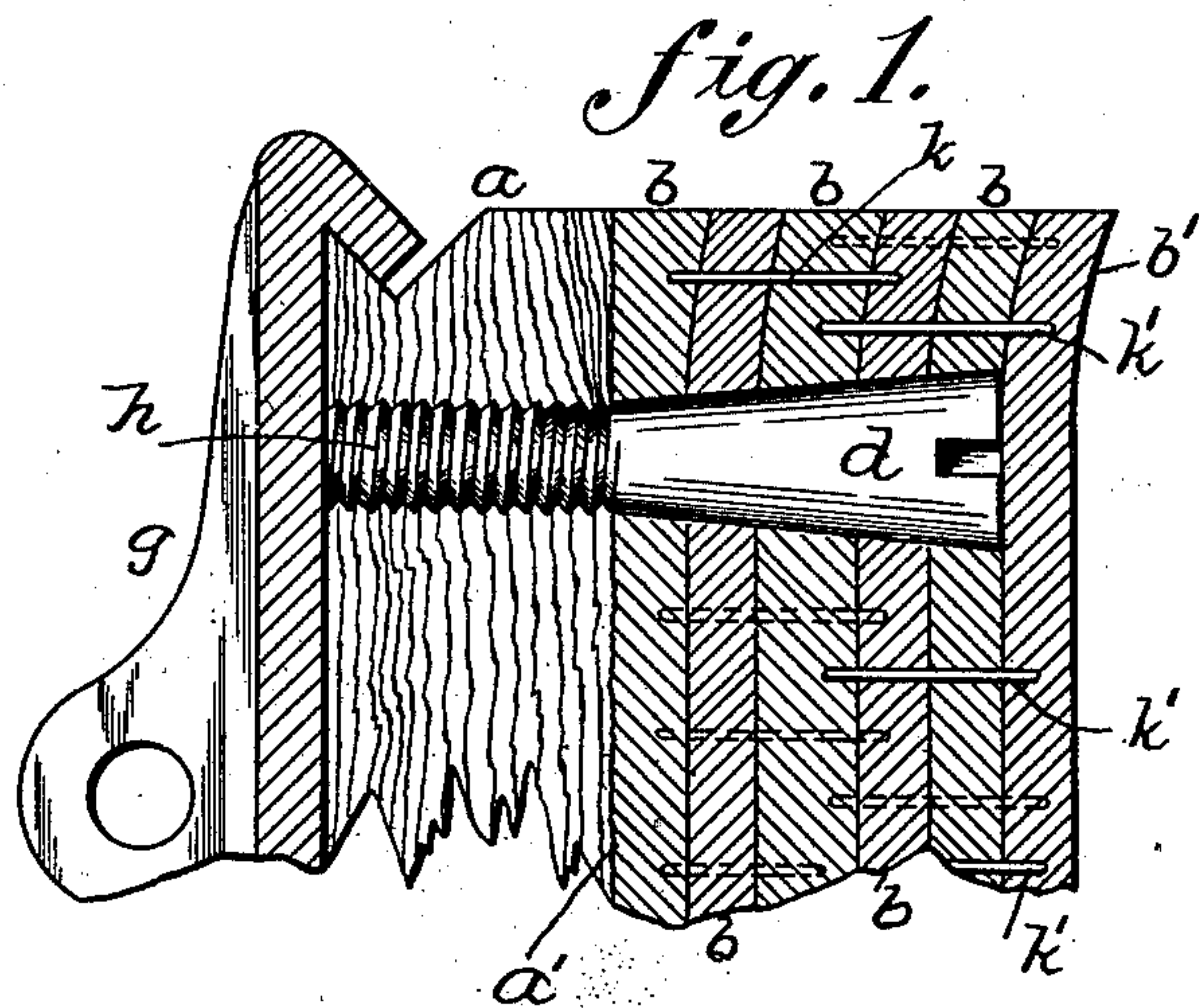
No. 671,860.

Patented Apr. 9, 1901.

G. GUMPEL.
BRAKE BLOCK.

(Application filed July 28, 1900.)

(No Model.)



Witnesses:-
Jas. C. Hopkins.
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Inventor:
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UNITED STATES PATENT OFFICE.

GUSTAV GUMPEL, OF BERLIN, GERMANY.

BRAKE-BLOCK.

SPECIFICATION forming part of Letters Patent No. 671,860, dated April 9, 1901.

Application filed July 28, 1900. Serial No. 25,164. (No model.)

To all whom it may concern:

Be it known that I, GUSTAV GUMPEL, a subject of the Emperor of Germany, residing at Jagers street 13, Berlin, Germany, have invented certain new and useful Improvements in Brake-Blocks; 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 brake-blocks for the brakes of all kinds of vehicles, the object of the invention being to provide an improved block of a construction by means of which many difficulties heretofore encountered in the use of such blocks are obviated.

In the accompanying drawings, Figure 1 is a sectional view of part of a brake-shoe carrying part of a brake-block constructed in accordance with my invention. Fig. 2 is a similar view of part of the brake-block, the shoe being left off and the screw-fastening being of a modified form.

Referring to the drawings by letters, *g* indicates a brake-shoe of any ordinary construction, in which is dovetailed a block of hard wood *a*, the face *a'* of which is roughened or corrugated. To the face *a'* is secured any number of strips *b*, of leather of any kind, secured together by means of dowel-pins *k*, the ends of which are embedded in the leather.

Suitable cement or gluten is placed between the wood *a* and leather *b*, between the leather strips, and on the pins *k*, and the whole submitted to a very high pressure.

h indicates a wooden screw threaded into the block *a*, said screw being provided with a conical head *d*, which when the screw is driven home is tightly drawn into conical holes in the leather strips *b*, the holes in both leather and wood being filled with gluten before the screw is inserted. The head of the screw might be in the wood, as at *e* in Fig. 2, instead of the leather, in which case the head may be cylindrical instead of conical. The threaded portion of the screw in the latter case would pass into the leather, as at *h'* in

Fig. 2, and the hole might be made larger and filled with a quick-setting cement, as at *i* in Fig. 2, before the screw is entered.

In any case the composite block of wood having been made up as described and secured to the shoe *g*, a facing-strip *b'*, of leather, is secured thereto by cemented dowel-pins *k'* and cement between the last strip *b* and the face-strip *b'*.

A block can be cheaply and quickly made as before described, and it will be extremely solid and durable. It will expose no metal screw or nail heads at its rubbing-surface and can be readily repaired when worn.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A brake-block comprising a hard-wood block shaped for attachment to the shoe, having a roughened or corrugated face and a plurality of strips of leather secured upon said face by means of cemented dowel-pins embedded in the leather and cemented between the strips and the roughened surface and a wooden screw engaging in cement-filled holes in line with each other in the wood and leather, substantially as described.

2. A brake-block comprising a hard-wood block shaped for attachment to the shoe, having a roughened or corrugated face and a plurality of strips of leather secured upon said face by means of cemented dowel-pins embedded in the leather and cement between the strips and the roughened surface said wooden block being provided with a threaded hole, and the leather strips with a conical hole in line with said threaded hole, and a conically-headed wood-screw inserted in said holes, substantially as described.

In witness whereof I have hereunto signed my name this 19th day of June, 1900, in the presence of two subscribing witnesses.

GUSTAV GUMPEL.

Witnesses:

WOLDEMAR HAUPT,
M. W. WILRITH.