

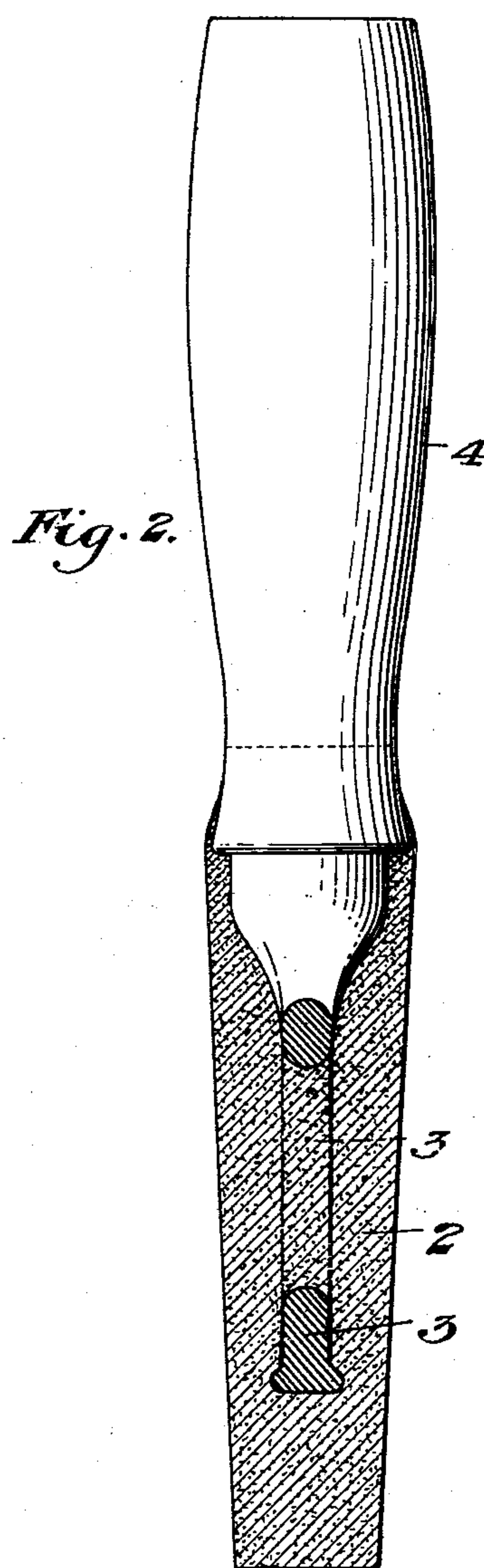
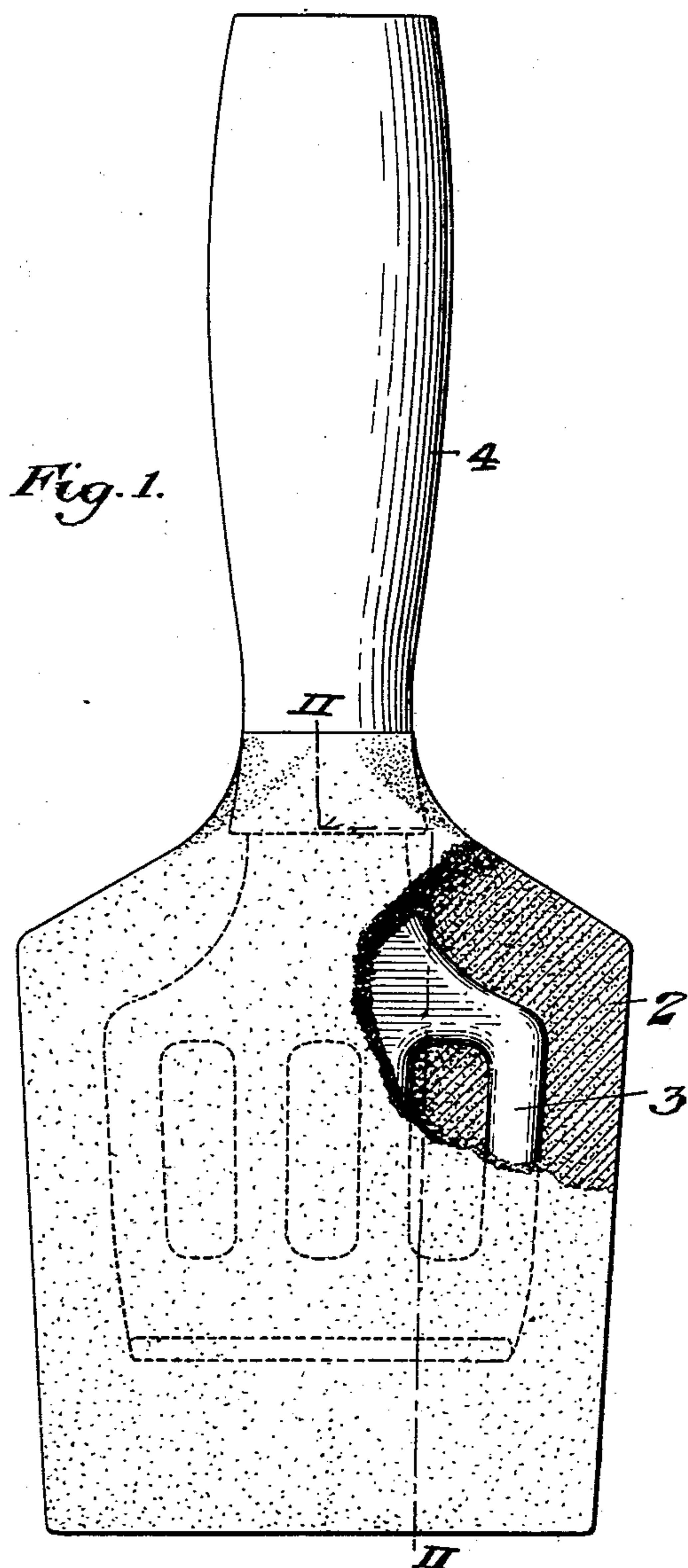
No. 684,396.

Patented Oct. 8, 1901.

J. J. CARROLL.
RAMMER.

(Application filed Nov. 2, 1900.)

(No Model.)



WITNESSES

L. A. Carroll
W. M. Corwin

INVENTOR

John J. Carroll
by Baxendell & Baxendell
his Attorneys

UNITED STATES PATENT OFFICE.

JOHN J. CARROLL, OF CLEVELAND, OHIO, ASSIGNOR TO THE NATIONAL MALLEABLE CASTINGS COMPANY, OF SAME PLACE.

RAMMER.

SPECIFICATION forming part of Letters Patent No. 684,396, dated October 8, 1901.

Application filed November 2, 1900. Serial No. 35,243. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. CARROLL, of Cleveland, in the county of Cuyahoga and State of Ohio, (whose post-office address is No. 160 Alanson street, Cleveland,) have invented a new and useful Improvement in Rammers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 shows in elevation, partly in section, a rammer constructed in accordance with my invention, the core or form of the rammer being indicated partly by dotted lines. Fig. 2 is a vertical section on the line II II of Fig. 1.

The object of my invention is to improve the construction of rammers which are used by molders in making sand molds for casting. I have found that a more efficient rammer than heretofore can be made by employing a rubber block, which is applied to and vulcanized around a base or holder. With such tool a molder is no longer liable to injure the patterns, which are often expensive and more or less fragile, and he is thus enabled to work with security and with greater rapidity than heretofore.

In the accompanying drawings, 2 represents the rubber block which constitutes the rammer, and 3 is the base or core of metal or other suitable material to which the block is applied and on which it is vulcanized.

4 is the handle by which the rammer is manipulated. As will be seen from the drawings, the rubber block covers the bottom of and the whole of the sides of the base 3, thus presenting a smooth unbroken surface below said handle. Said rubber block preferably constitutes the entire side and end portions of the rammer.

As shown in the drawings, the core is formed with several slots or openings in which the rubber can embed itself and by which it is held. The core which I show in the drawings is well adapted for my purpose, since it is of suitable size and shape to hold the block with great security; but its form may be varied without departure from my invention.

When applied to use, the rammer presents a soft ramming-surface, which is very efficient in its operation and presents the advantages enumerated above.

I claim—

A rammer for sand molds, comprising a handle and base, and a rubber block which covers the whole of the sides and end of the base, said block presenting a smooth unbroken surface below said handle; substantially as described.

In testimony whereof I have hereunto set my hand.

JOHN J. CARROLL.

Witnesses:

O. H. BROOKS,
D. W. CALL.