

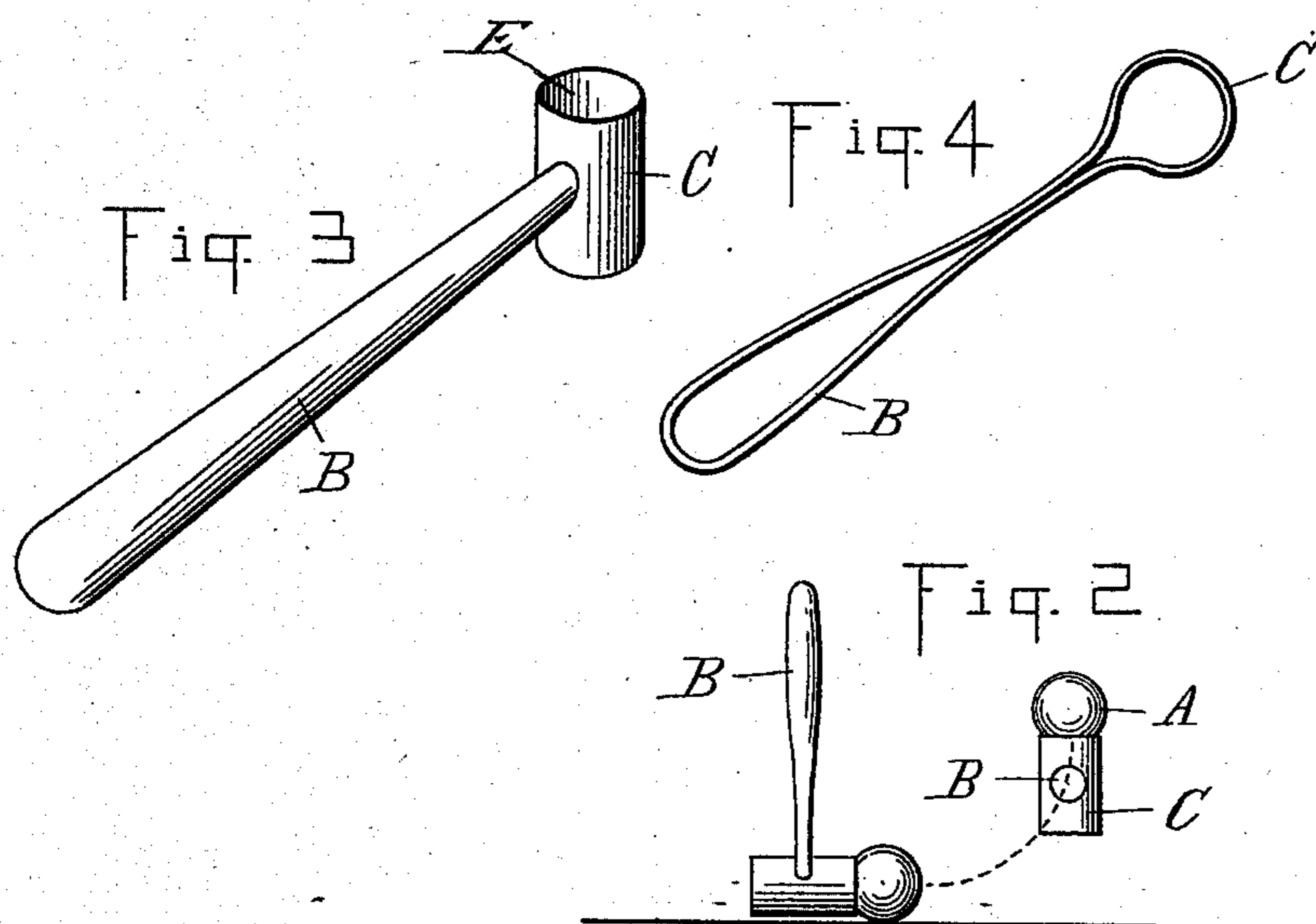
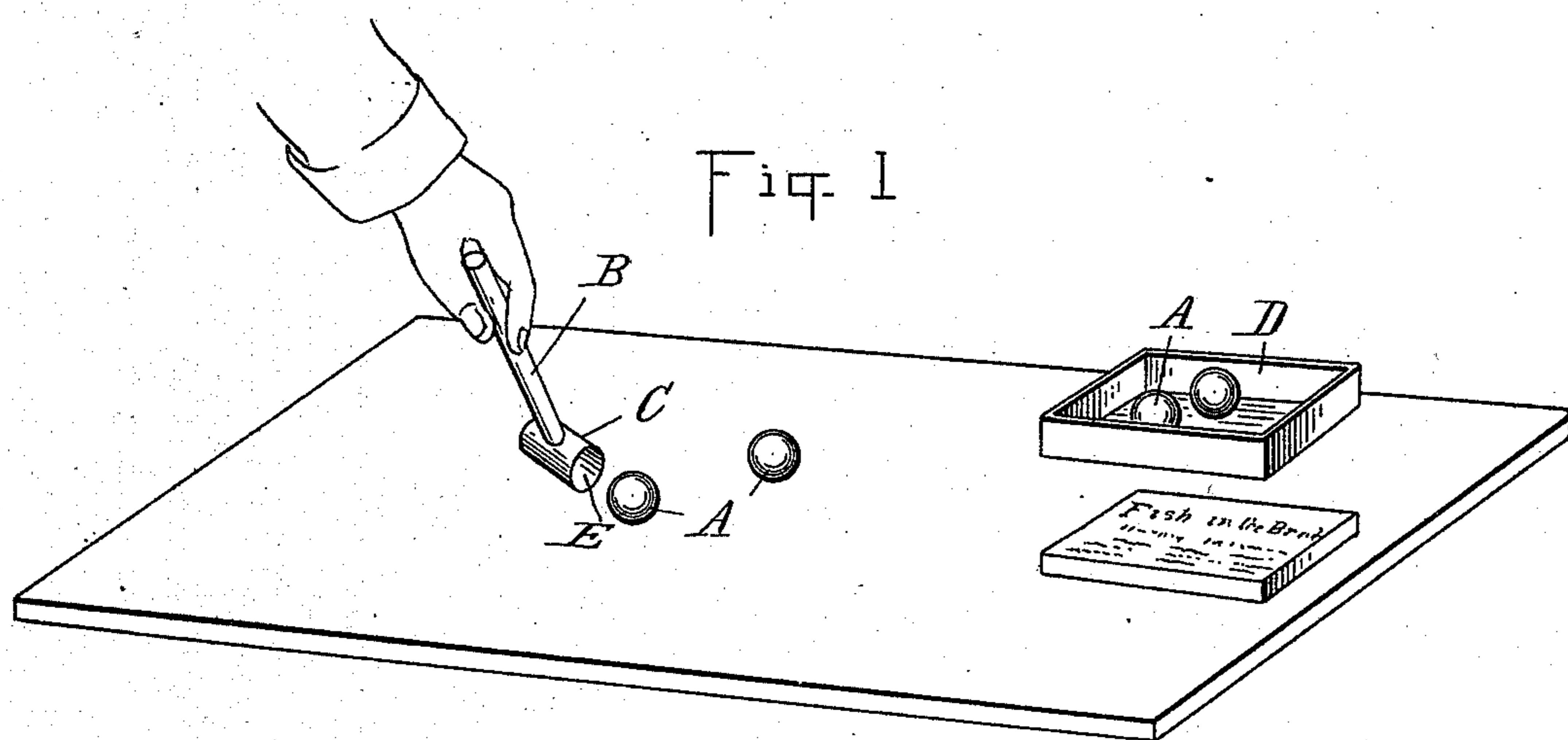
(No Model.)

O. M. MORSE.

PUZZLE.

No. 412,647.

Patented Oct. 8, 1889.



Witnesses:  
P. M. Hulbert  
J. Paul Mayer

Inventor:  
Orville M. Morse  
By James Whittemore  
Atty.

# UNITED STATES PATENT OFFICE.

ORVILLE M. MORSE, OF JACKSON, MICHIGAN, ASSIGNOR OF ONE-HALF TO  
JOHN G. MUNDY, OF SAME PLACE.

## PUZZLE.

SPECIFICATION forming part of Letters Patent No. 412,647, dated October 8, 1889.

Application filed May 6, 1889. Serial No. 309,680. (No model.)

*To all whom it may concern:*

Be it known that I, ORVILLE M. MORSE, a citizen of the United States, residing at Jackson, in the county of Jackson and State of Michigan, have invented certain new and useful Improvements in Puzzles, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in puzzles, the object of which is to amuse as well as to teach; and the invention consists in the peculiar nature of the puzzle as presented in a device, all as more fully hereinafter described, and shown in the accompanying drawings, in which—

Figure 1 is a perspective view of my puzzle as presented for solution. Fig. 2 is a diagram of the same, illustrating the manner of solving it. Fig. 3 is a perspective view of the scoop which forms a part of my puzzle, and Fig. 4 is a modified form of it.

My puzzle is based upon the physical property of bodies known as "inertia," and requires for its solution a thorough understanding of the same, combined with a dexterous manipulation.

The device which embodies my puzzle consists of one or more spherical bodies A, of marble, glass, rubber, or other suitable material, and of a peculiarly-shaped scoop consisting of the handle B, on the end of which is secured or formed integral therewith an annular bearing C. The diameter of this annular bearing has to be smaller than the diameter of the spherical body.

This device is presented in the following manner: The spherical body or bodies are placed on a level surface—such as a table—where they are free to roll in any direction and lie quiet when not disturbed. The person desiring to solve the puzzle is handed the scoop with the proposition to scoop up the balls from the table by its use and in the manner shown in Fig. 2—that is, by bringing the annular bearing against the side of the spherical body and scooping it up solely by a dexterous manipulation of the scoop.

To prevent a misunderstanding of the manner in which the scoop is to be applied to the balls, I prefer the scoop shown in Fig. 3, which, having a tubular bearing E, prevents it from being used otherwise than in the manner required.

It will be seen that on account of the law of inertia the solution of the puzzle is possible, provided the inertia of the body is not disturbed by the manipulation to such a degree as to cause the sphere to acquire a sufficient momentum to cause it to fly off the bearing on the scoop.

To increase the difficulty of solving the puzzle, I provide a number of spherical bodies of different diameters or of different density.

In presenting the device for sale I intend to inclose the spherical bodies in a small box D, sufficiently large to inclose all the devices, and with the directions for operating it printed on the cover of the box, and then in presenting it for solution the spherical bodies have to be returned into the box in the manner described.

What I claim as my invention is—

1. The combination, in a puzzle, of one or more spherical bodies, and a scoop consisting of a handle with an annular bearing of smaller diameter than the diameter of the said body or bodies, to be used in the manner and for the purpose described.

2. The combination, in a puzzle, of a number of spherical bodies of different sizes or weight, and a scoop consisting of a handle secured to a tubular body, forming an annular bearing of smaller diameter than the diameter of the spherical bodies, said scoop to be applied substantially in the manner described.

In testimony whereof I affix my signature, in presence of two witnesses, this 27th day of April, 1889.

ORVILLE M. MORSE.

Witnesses:

J. PAUL MAYER,  
EAME BREARTY.