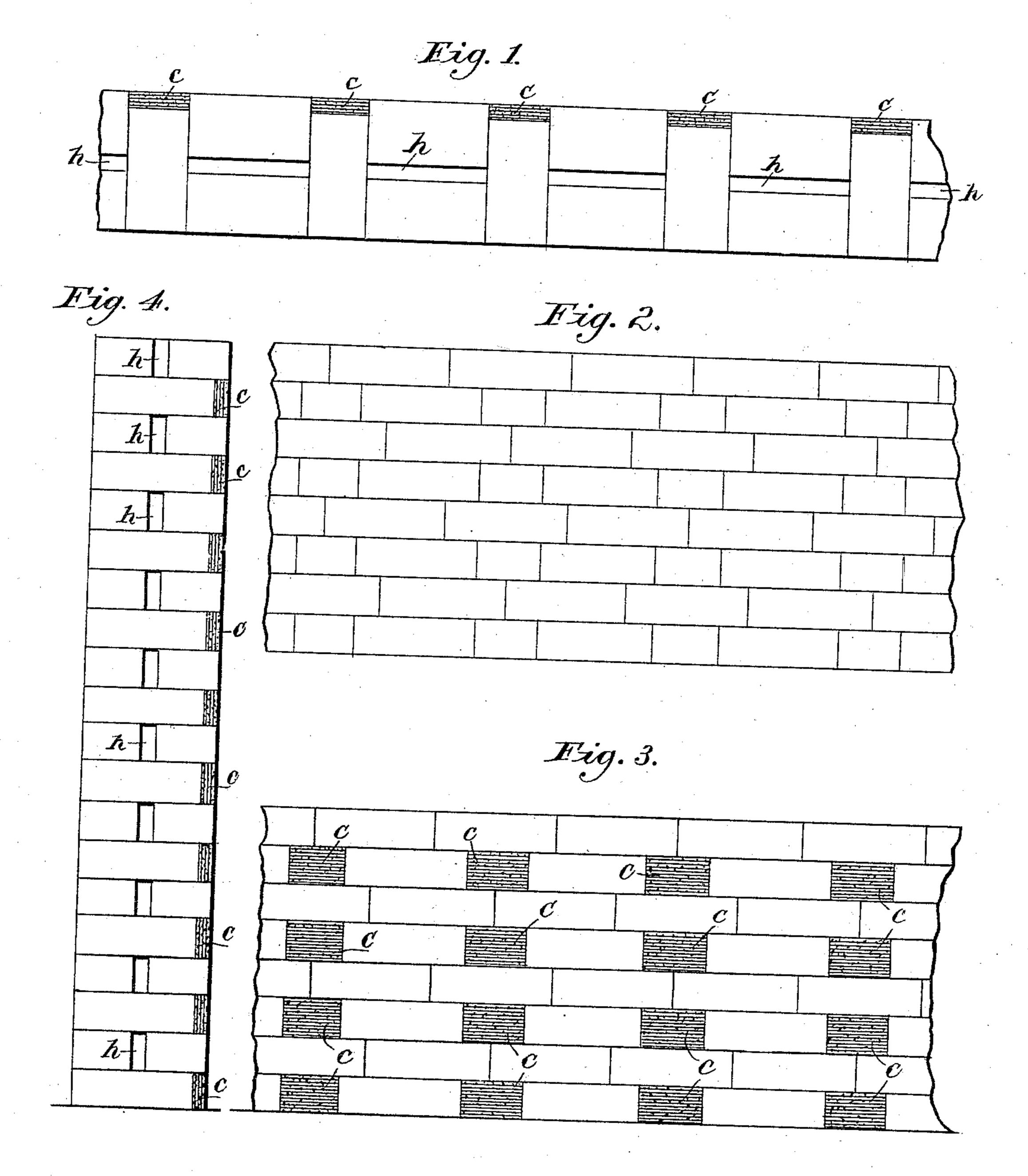
(No Model.)

## J. McMURTRY. BRICK WALL.

No. 412,858.

Patented Oct. 15, 1889.



Witnesse: J. a. Charles J.D. Welgus

John Mc Hustry

## United States Patent Office.

JOHN MCMURTRY, OF LEXINGTON, KENTUCKY.

## BRICK WALL.

SPECIFICATION forming part of Letters Patent No. 412,858, dated October 15, 1889.

Application filed March 22, 1889. Serial No. 304,377. (No model.)

To all whom it may concern:

Be it known that I, John McMurtry, a citizen of the United States, residing at Lexington, in the county of Fayette and State of 5 Kentucky, have invented a certain new and useful Improvement in the Construction of Brick Walls, whereby I am enabled to greatly retard or prevent the passage through the same of heat, cold, or moisture, and thereby 10 get a stronger wall than is ordinarily built, even in walls of fifty per cent. additional thickness, and lessening the cost of building brick walls in nearly the same proportion; and I do hereby declare that the following is a full, 15 clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

Heretofore parties, for the sake of economy, have built their outside walls one brick thick, calling them "nine-inch" walls, and with heading-courses every sixth course in height, and thus subject themselves to the great annoyance of having (at every beating rain) damp walls, especially at the heading-courses of the brick, that convey the moisture through the wall, as above named.

My improvement enables any builder to build a one-brick or nine-inch wall as strong 30 as the one-and-a-half-brick walls, and entirely free from moisture passing to the inside of the wall, and also be more secure against heat and cold than with the one-and-a-half-brick wall when built in the ordinary 35 way.

To carry my invention into effect, I make, say, one-inch space (more or less) between the out and in side courses of brick, laid in what is termed "stretchers," and the next course in what is termed "headers and stretchers," taking care to break the joints of the previous course, and so continue alternately until the top is reached, and thus making a binding-course, with headers every other course, all as will readily be understood by reference to the accompanying drawings, in which—

Figure 1 represents the top view of the Any attempt brick wall built with the space named be- of the cements tween the out and in side courses, showing to change the heading-courses, as described, and show- brick wall.

ing that the headers come even with the outside of the wall, and the inside ends fall short of the inside course equal to the space left between the out and in side courses, as 55 above described, and said space is marked C in the several figures, which, after the house is roofed in, must be filled with a proper cement flush with the inside line of wall and allowed to dry before being plastered in the 60 ordinary way. Fig. 2 represents the outside elevation of said brick wall, showing its general construction and appearance. Fig. 3 represents the elevation of the inside of the brick wall, with the cement filled in opposite 65 the headers marked C, as above named. Fig. 4 represents a sectional end view of the improved brick wall, showing its construction and the space between the outside and inside courses, with the cement C opposite the ends 70 of the heading-courses on the inside, as above described.

I am aware that what is termed "hollow brick walls" are not new, but they have always been built not less than one and a half brick 75 in thickness, and necessarily costing fifty per cent. more than the one-brick or nine-inch wall.

I am also aware that one-brick or nine-inch walls have been stripped or studded inside, 80 and lathed and plastered, and, although dampness does not show on the plastering inside, yet it is not only expensive, but the plastering on the laths is less firm and very much inferior to plaster on the solid brick wall, to 85 say nothing about the studding, &c., being a harbor for rats, &c.

The construction of header and stretchers and stretchers alternately may be varied—that is, the course of headers and stretchers 90 may be every other course, or every third or fourth or other numbered course, provided it continues a thorough bonding of the wall; and the space may be varied, provided it be wide enough to prevent its being filled with 95 mortar, or not too wide so as to endanger the bonding of the header and require unnecessary expense in the cement, marked C. Any attempt to substitute a small bat in place of the cement C would cause the bricklayer 100 to change the same as for one-and-a-half-brick wall.

Having fully described my invention, what I desire to claim and secure by Letters Patent is—

A one-brick wall constructed with courses or series of adjacent courses of inside and outside stretchers, separated by a space h of one inch, (more or less,) and a course consisting of stretchers and headers interposed between the aforesaid courses or series of courses, the

stretchers in this course being separated, as in to the first-mentioned courses, the spaces left by the headers on the inside face of the wall being filled with good cement, as and for the purposes set forth.

JOHN MCMURTRY.

Witnesses:

F. P. SMITH,

G. D. WILGUS.