

R. SPEIDEL.

Malt Drier.

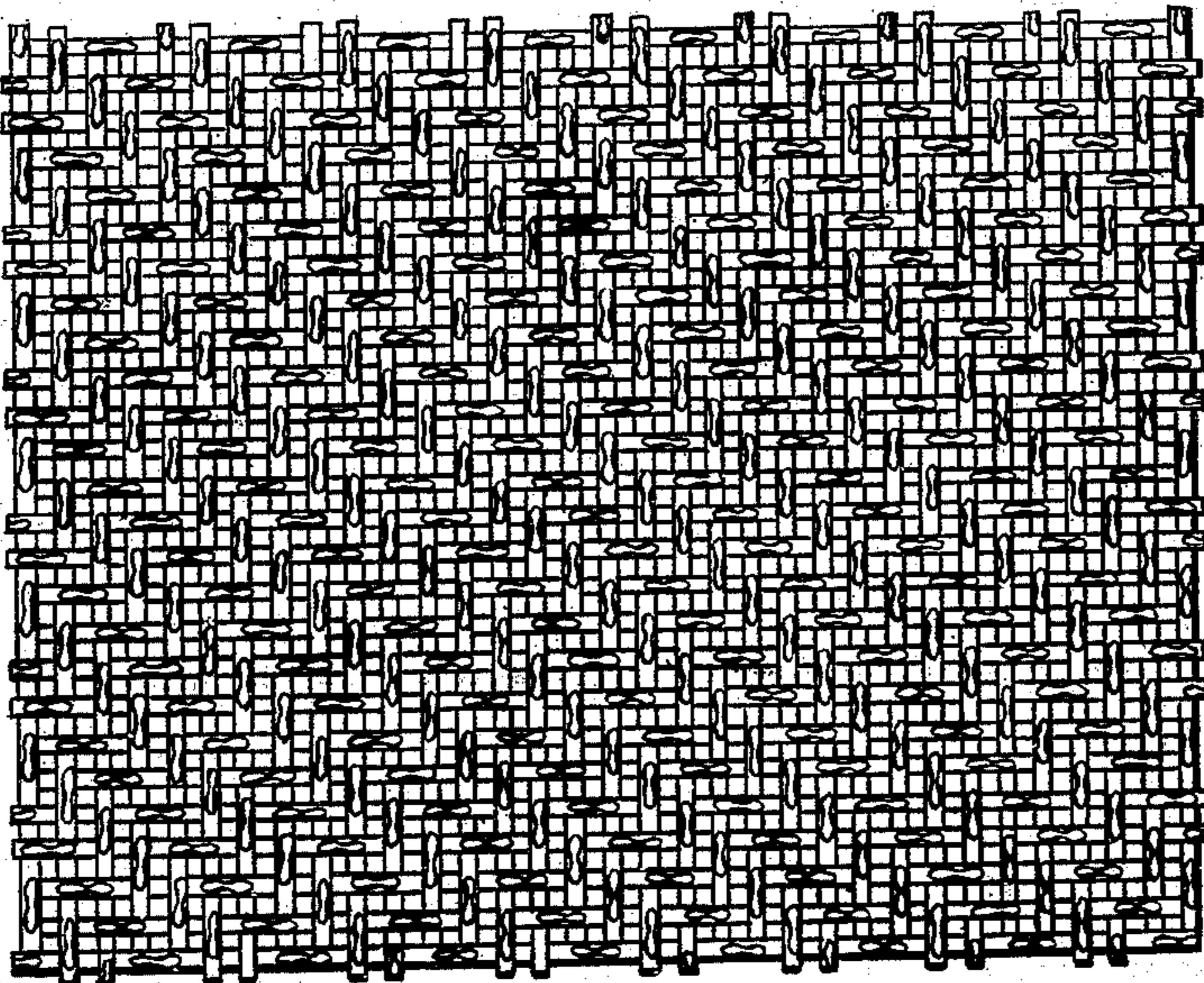
No. 68,664.

Patented Sept. 10, 1867.

Fig. 2



Fig. 1.



Witnesses:

Henry Wehle  
Alex Wehle

Inventor:

*Reinhard Speidel*

# United States Patent Office.

REINHARD SPEIDEL, OF NEW YORK, N. Y., ASSIGNOR TO THE CLINTON  
WIRE-CLOTH COMPANY, OF CLINTON, MASSACHUSETTS.

*Letters Patent No. 68,664, dated September 10, 1867.*

## IMPROVED MATERIAL FOR FLOORS OF MALT-KILNS.

The Schedule referred to in these Letters Patent and making part of the same.

Be it known that I, REINHARD SPEIDEL, of the city of New York, have invented a new and improved Material for Bottoms or Gratings of Malt-Kilns; and I do hereby declare the following to be an exact description of my said invention.

The nature of my invention consists in obdurating and stiffening wire cloth, and to render it strong and its surface smooth, and then to attach such wire cloth as bottoms or gratings to malt-kilns.

To enable others skilled in the art to which my invention relates to make and use the same, I will proceed to describe the same, reference being had to the annexed drawings, in which—

Figure 1 represents a plane view of the new material, and

Figure 2 a sectional view thereof.

I deem it proper to state that heretofore the gratings or bottoms for malt-kilns were made of sheet-iron plates, in which small conical holes were drilled, through which the hot air passed. In order to prevent the malt from falling through these holes in the bottom their size had to be very small, and the number of the holes could not be large, as the close contiguity of the holes would have impaired the strength of the plate. Owing to these circumstances the great body of the malt could not readily come in direct contact with the hot air, (emanating from below the bottom,) the malt had to be constantly stirred, and therefore the process of malt-drying was protracted and inconvenient.

The application of my invention obviates the above defects. A grating or bottom made of wire cloth rolled or pressed as hereinafter described admits the intrusion of hot air to an unlimited extent, the holes are close to each other, and very numerous, and the resistibility or strength of this material is superior to that of the perforated sheet iron at present used. The surface of this wire cloth is smooth, otherwise it would present impediments to the shovelling and stirring of the malt.

The wire cloth is woven in the usual manner, and the size of the wire threads may vary according to the desired strength of the bottoms or gratings. Iron, copper, or any other suitable wire may be used. When the wire is woven into cloth the cloth is rolled or pressed between two cylinders, and then the material is ready for use. It may, however, (if of iron wire,) before or after being pressed, be galvanized. It is then applied to the malt-kiln in the same manner in which the gratings now in use are applied. The substitution of this material for the iron plates secures the advantages above enumerated.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

1. The pressing and rolling of wire cloth, in the manner and for the purpose described.
2. The application of rolled or pressed wire cloth as a bottom to malt-kilns, in the manner and for the purpose described.

REINHARD SPEIDEL.

Witnesses:

H. WEHLE,

ALEX. WEHLE.