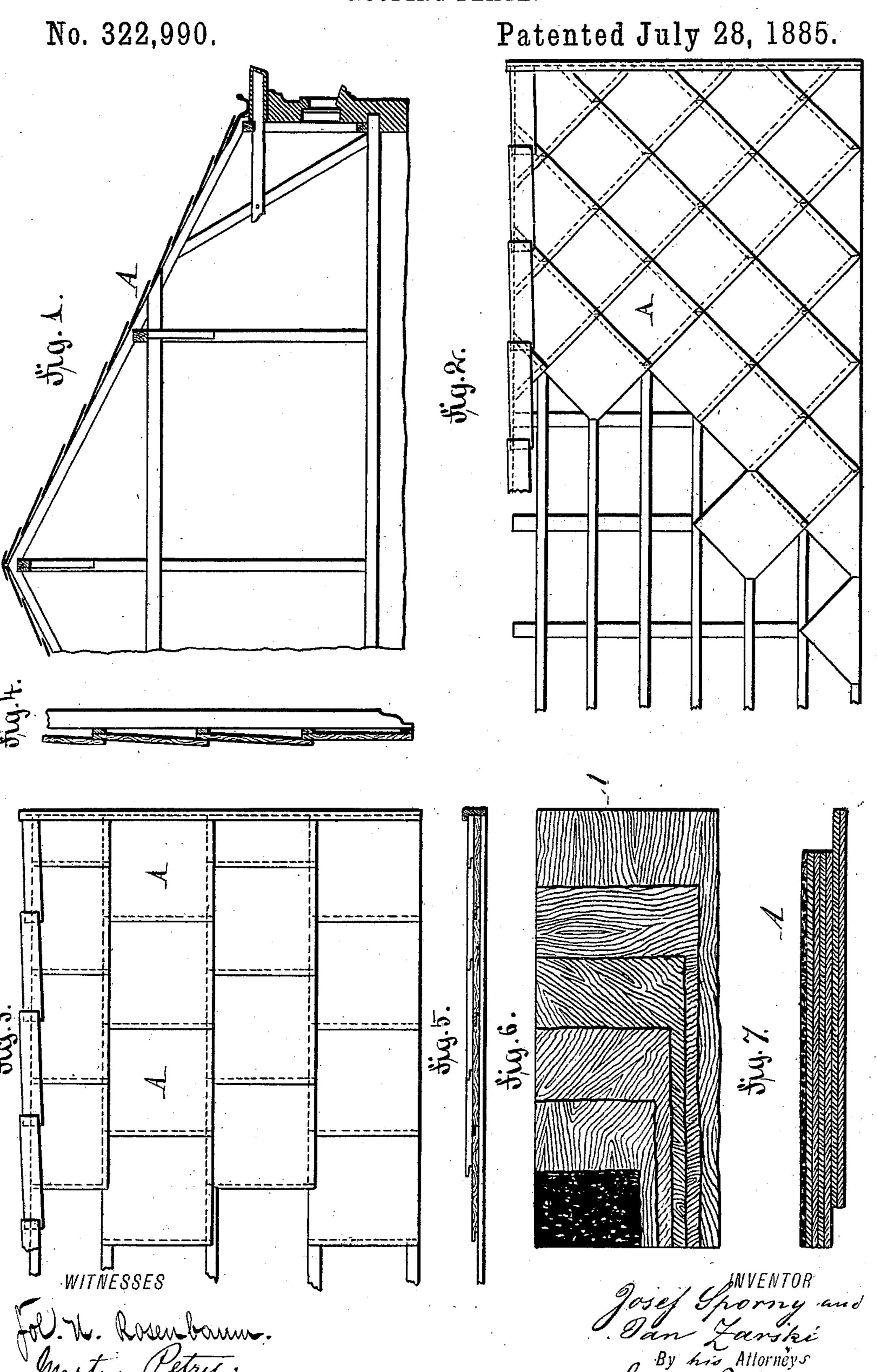
J. SPORNY & I. ZARSKI.

ROOFING PLATE.



United States Patent Office.

JOSEF SPORNY AND IAN ZARSKI, OF WARSAW, RUSSIA.

ROOFING-PLATE.

SPECIFICATION forming part of Letters Patent No. 322,990, dated July 28, 1885.

Application filed April 27, 1885. (No model.) Patented in England April 13, 1885, No. 4,539.

To all whom it may concern:

Be it known that we, Josef Sporny and Ian Zarski, both subjects of the Emperor of Russia, residing at the city of Warsaw, in the Empire of Russia, have invented certain new and useful Improvements in Roofing-Plates, of which the following is a specification.

This invention has reference to an improved roofing plate or shingle made of veneers united at cross-grain; and the invention consists of a roofing-plate formed of layers of veneers united at cross-grains to each other and coated at the outer surface with a layer of asphaltum and small stones and at the under side with soluble 15 glass.

In the accompanying drawings, Figure 1 represents a vertical transverse section of a roof made of our improved roofing-plates. Figs. 2 and 3 are side elevations of a roof, showing different arrangements of the roofing-plates. Fig. 4 is a vertical transverse section through the roofing-plates; Fig. 5, a vertical longitudinal section of the same, and Figs. 6 and 7 are respectively a plan and a vertical section of a roofing-plate drawn on a larger scale.

Similar letters of reference indicate corre-

sponding parts.

The roofing-plates that form our improved roof-covering are made of from two to five lay30 ers of veneers that are arranged at cross-grains to each other, and united by means of a suitable cement in such a manner that the roofingplate can resist the influences of the atmosphere, moisture, and rain.

The roofing-plate A is made of any suitable size and of square, oblong, or other shape. To impart a high degree of durability to the same, the roofing plates are soaked in tar or suitable bituminous substances to render them water-proof. They are coated at their outer

surface with a layer of asphaltum, into which are pressed, while soft, small pebbles or stones, while the under side of the plates is coated with soluble glass or any other approved substance, whereby both sides are rendered fire- 45 proof.

The roofing-plates can be attached to the roof in different modes. In Fig. 2the roofing-plates are arranged diagonally to the rafters, while in Fig. 3 they are arranged parallel to 50 the rafters. In Figs. 5 and 7 the plates are shown with recessed edges, so as to facilitate the overlapping of the plates. The recessed edges, however, may be dispensed with.

The advantages of our improved roofing- 55 plates are, that the roofs do not require to be boarded, but that the plates can be put down directly on the rafters.

The roof-covering is cheap, light, and durable, and has a high degree of resistance to at-60 mospheric influences. It can be used with any slope of roof and distance between the rafters.

Having thus described our invention, we claim as new and desire to secure by Letters 65 Patent—

A roofing-plate consisting of two or more veneers arranged at cross-grain to each other, and coated at the outer surface with asphaltum and broken stones, and at the under side with 70 soluble glass or other fire-proof substance, substantially as set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

JOSEF SPORNY. IAN ZARSKI.

Witnesses:

WIKFOR ZABIERZOWSKY, CHEWAN CHYSWEM.