

S. BAIRD.
PAVEMENT.

No. 181,392.

Patented Aug. 22, 1876.

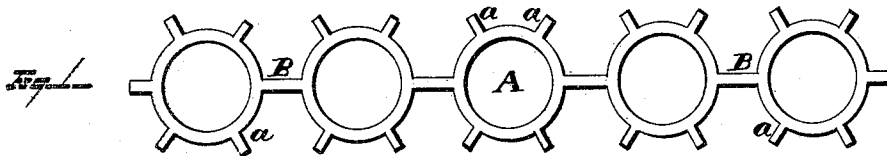
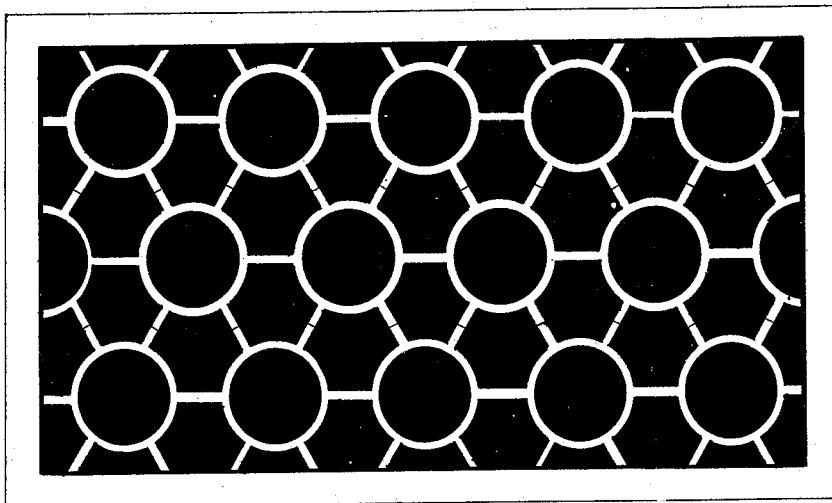


Fig. 3.



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IMPROVEMENT IN PAVEMENTS.

Specification forming part of Letters Patent No. **181,392**, dated August 22, 1876; application filed June 23, 1876.

To all whom it may concern:

Be it known that I, SAMUEL BAIRD, of Baird Iron Works, in the county of Perry and State of Ohio, have invented certain new and useful Improvements in Pavements; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to pavements for use either under foot or for heavy truck wear and animal hoof; and has for its object a pavement of any suitable material, held and stayed by interposed metallic devices adapted to withstand surface wear in themselves, and yet serve as cross-ties and binders to the composition matter and entire bed of pavement.

My invention consists in the combination, with any suitable composite matter, of a series of single iron rings, provided with exterior wedge-shaped projections, and rigidly united by a connecting-strip, whereby the composition is firmly secured in a constant position, and the tendency of the binder to change its plane of level relative to said pavement-bed is obviated.

Referring to the drawings, Figure 1 is a plan view of a system of my rings. Fig. 2 is a side elevation of same, while Fig. 3 shows same embedded in a composition, as in actual use.

A is a ring of any suitable dimensions, with relative inner and outer peripheries, as may be desired, sufficient central space being left to receive applied composition and form a wearing-surface in combination with same. *a* are flanges on the circumference, extending the vertical height of the ring, and parallel with same, so that the lower and upper extremities of the flanges form continuations of and a constant plane bearing-surface with either vertical extremity of the ring A. These flanges are of a wedge-shaped construction, with the head or swell of the wedge at the wearing-surface, while the narrow extremity of same comes flush with the lower bearing-plane of the ring. By this means the ring is packed and secured within the paving com-

position, so as to be incapable of settling below the surface of the bed, and able to resist all tendency toward a change of level. B are the central strips, cast or wrought into the same continuous piece with the adjacent bound rings, and securely holding such together. They are of vertical dimensions corresponding to the rings, so that they do not cause a break or joint in the surface, either bearing or wearing. Any number of these rings may be thus secured together, and they may be not only in a single straight row, but, if desired, may be of any form, such as right angle, a square, quincunx, or in double rows, with cross-strips at any interval. The material of same may be of either cast or wrought iron, in which cases the flanges and uniting strips will respectively be either cast or wrought in one and the same piece with each other and the central rings.

In preparing a pavement constructed with my improvement, the bed should be laid flat and smooth and hard, as is usual. Upon this are laid my systems of rings, and then the composition mass is applied over same in full proportion, so as to fill up the central space within each ring and all space intermediate the exteriors, thus causing the surface to be flush with the wearing plane of the rings, and forming therewith a clear and constant level pavement.

The filling composition forms no part of my invention, and may be asphaltum, lime, tar, gravel, &c., alone or in any proportions and parts, or any other appropriate material may be employed.

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

The combination, with a paving composition, of a series of single iron rings, provided with exterior wedge-shaped projections, said series rigidly united by a single connecting-strip, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

SAMUEL BAIRD.

Witnesses:

JOHN S. NIXON,
MARY M. NIXON.