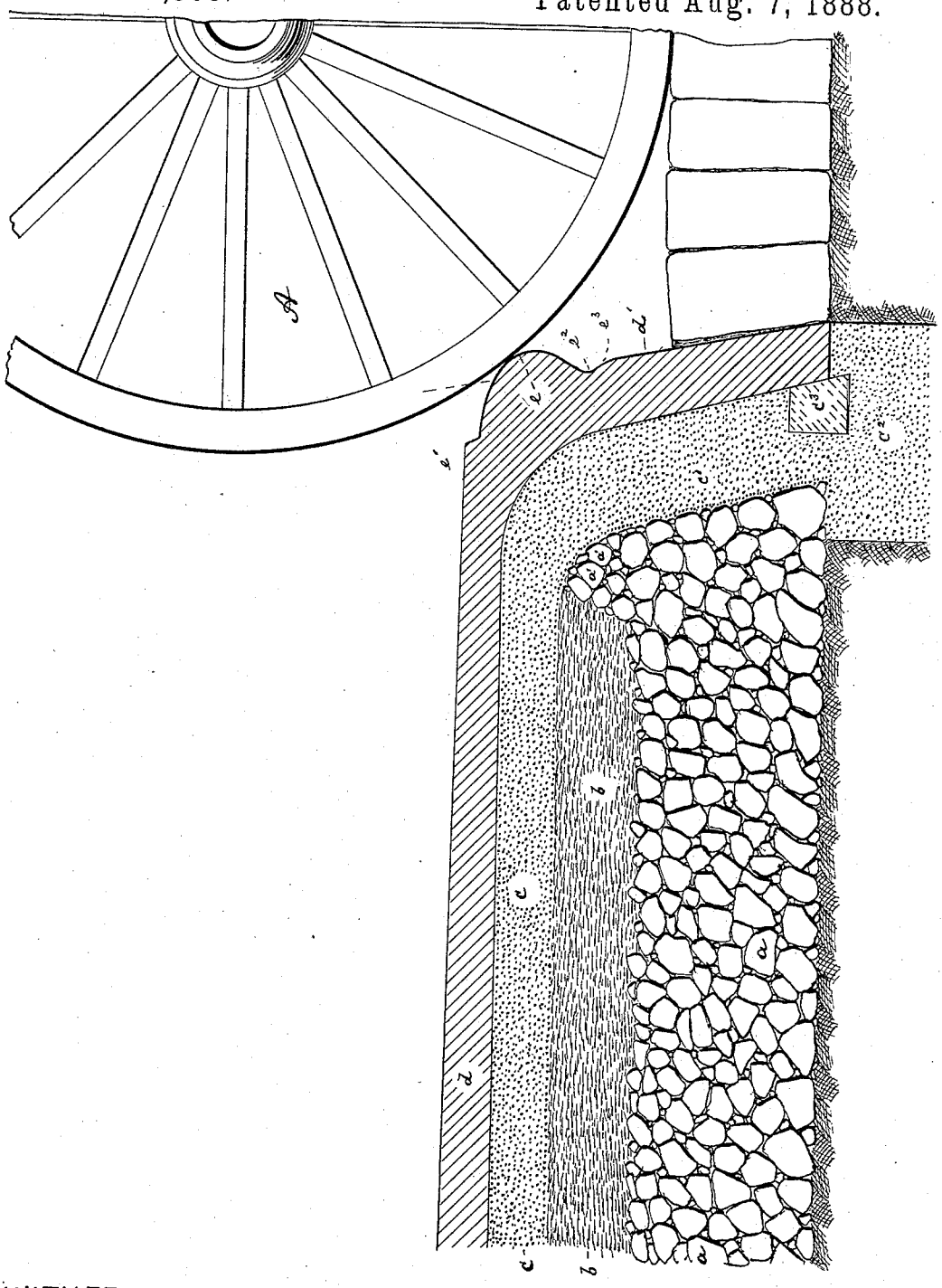
(No Model.)

J. W. MacKNIGHT.

ARTIFICIAL PAVEMENT.

No. 387,308. Patented Aug. 7, 1888.



WITNESSES.

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UNITED STATES PATENT OFFICE.

JOHN W. MACKNIGHT, OF NEW YORK, N. Y.

ARTIFICIAL PAVEMENT.

SPECIFICATION forming part of Letters Patent No. 387,308, dated August 7, 1888.

Application filed June 26, 1888. Serial No. 278,255. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. MACKNIGHT, of New York city, New York, have invented a new and Improved Artificial Pavement, of which the following is a specification.

This invention relates to an improvement upon Letters Patent No. 373,295, granted to me November 15, 1887. That patent describes an artificial pavement in which the curbing, as well as the top layer of the sidewalk proper, is formed from a composition or cement.

The present invention has for its object to so shape the curbing that its main body, as well as the arris, will be protected against fracture owing to the impact of wheels that back up against or strike the curb.

The invention also relates to an improvement in the formation of one of the layers composing the pavement.

The invention consists in the various features of improvement more fully pointed out in the claims.

The accompanying drawing represents a vertical transverse section of an artificial pavement constructed according to my invention.

The letter *a* represents the lowermost layer of an artificial pavement, consisting of irregular rocks with a front edging, *a'*. Upon this layer there is placed the second layer, *b*, of coal-ashes.

c is the third layer, consisting of one part of ashes, one part of sand, and a suitable quantity of cement. Upon the layer *c* there is placed the top layer, *d*, composed of crushed trap-rock and cement. The two uppermost layers, *c d*, are turned downward at the curb at an obtuse angle, as at *c' d'*, to form the curbing. The upright portion *c'* of layer *c* is placed upon a foundation, c^2, made of the same material, and projects both beneath the curbing *d'* and beneath the rocks *a*. This foundation c^2 prevents water that passes between the stones of a roadway from percolating through and undermining the foundation of the artificial pavement, and thus also protects the pavement against the action of the frost. While laying the foundation c^2, a joist is embedded into it, which is subsequently withdrawn. The space thus formed is filled out by a wedge, c^3, made of the same material as upper layer, *d*. This wedge prevents the pavement from becoming disturbed or shifted by reason of the pressure of the roadway against the curbing.

e' is the arris of the sidewalk, and e^3 the arris for the curb. The arris e^3 constitutes the lower edge of a groove, e^2, and this groove is strongly curved or inclined downward, so that the water will flow down evenly over arris e^3 and over the face of the curb *d'*, and will not settle in the groove e^2 or flow down in streaks. The corner of the pavement at the curb is made in the form of a rounded forwardly-projecting bead, *e*, that extends beyond the main line of curb *d'*—that is to say, if the inclined line of curbing *d'* is extended upward (as per dotted line in the drawing) it will pass back of the bead *e*. In this way a projection or nose is formed that will receive the impact of wheel A of any size and save the curbing proper and the arris from being injured. The curbing *d'* may be made in one piece with upper layer, *d*, or it may be made separate therefrom.

What I claim is—

1. The combination of an artificial pavement having a foundation and two upper layers, *c d*, that are bent down at the curb, with the laterally-extending foundation c^2 of layer *c*, and with the key c^3 within such foundation, substantially as specified.

2. The combination of an artificial pavement with a composite curbing, *d'*, having a bead, *e*, that projects forwardly beyond the line of the curbing, substantially as specified.

3. The combination of an artificial pavement having upper layer, *d*, with a composite curbing, *d'*, joined to the upper layer at an obtuse angle, and provided with forwardly-projecting bead *e* and with the groove e^2, substantially as specified.

4. The combination of an artificial pavement, consisting of a series of layers, of which the upper layer is curved downward at the curb, with a bead, *e*, projecting forwardly from the upper corner of the curb, substantially as and for the purpose specified.

JOHN W. MACKNIGHT.

Witnesses:

F. V. BRIESEN,

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