

(No Model.)

C. GEORGE.
ARTIFICIAL STONE.

No. 507,801.

Patented Oct. 31, 1893.

Fig. 1.



Fig. 2.

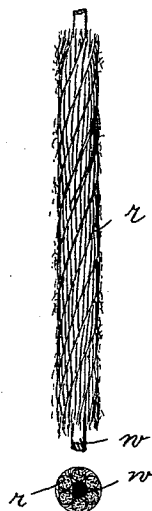


Fig. 3.

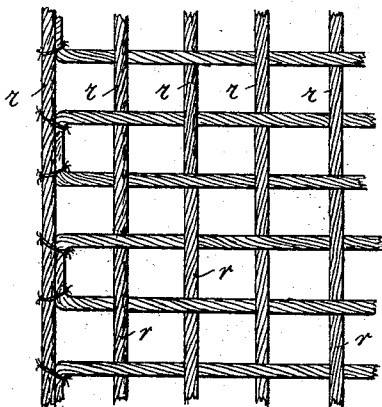
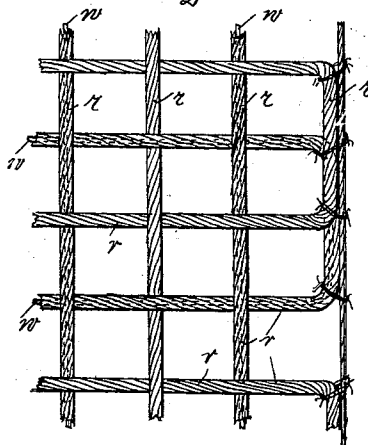


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

CHARLES GEORGE, OF BERLIN, GERMANY.

ARTIFICIAL STONE.

SPECIFICATION forming part of Letters Patent No. 507,801, dated October 31, 1893.

Application filed March 11, 1893. Serial No. 465,589. (No specimens.)

To all whom it may concern:

Be it known that I, CHARLES GEORGE, a subject of the King of Prussia, German Emperor, and a resident of Berlin, in the Kingdom of Prussia, German Empire, have invented certain new and Improved Artificial Stones, of which the following is an exact specification.

My invention relates to the construction of artificial stones and has for its purposes to increase the resistance and the elasticity of the stone. I attain these results by using combined ropes, *i. e.*, ropes which consist of wire and of fibrous material. These ropes are woven to a fabric which is inserted in the cement or other substance of which the artificial stone is made in the well known manner.

In order that my invention may be more readily understood, I refer to the accompanying drawings, in which—

Figure 1 is an external and sectional view of a compound rope of hemp, flax, jute, grass or the like, as employed by me. Fig. 2 is a similar view, in which a core of steel or other metal has been placed. Figs. 3 and 4 are examples of the manner, in which I prefer to lace or weave together the ropes shown in Figs. 1 and 2.

Similar letters denote corresponding parts throughout the different views.

In carrying my invention into effect, I form the combined ropes in the manner shown by Figs. 1 and 2. The single laces *r* of fibrous material are wound together thus forming a rope which may be woven to a fabric, as shown by Fig. 3. In Fig. 2 the laces *r* of hemp, flax, jute or the like are wound around a wire *w* of

steel or another metal, whereby the elasticity and the strength of the combined rope are greatly promoted. The woven fabric shown in Fig. 4 is composed of the ropes shown in Figs. 1 and 2, so that the different ropes are placed alternately.

It must be mentioned that the laces of fibrous material as well as the wire are impregnated or covered with tar before being wound together to a rope, whereby the elasticity and consistency of the combined rope are considerably increased.

The woven fabric or laced fabric constructed in the described manner is inserted in the artificial stone in such a manner, that it is covered by the cement or other material used for this purpose, thus forming different layers in the stone.

I remark here that I may when desirable also use single ropes of the material in Figs. 1 and 2 without being woven together as at Figs. 3 and 4.

Having thus fully described the nature of this invention, what I desire to secure by Letters Patent of the United States is—

An artificial stone inclosing woven fabrics of combined ropes, consisting of wire *w* and laces *r* of fibrous material, wound together, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CHARLES GEORGE.

Witnesses:

R. HERPICH,
E. SCHULTZE.