THE UTILITY OF GRANITE.

THE difficulty of working granite was once notorious; indeed, fer centuries the architect rather shunned this refractory material. But science has come to the rescue, and by mechanical help great results are obtained from the hardest rock. Where labor cost next to nothing in very early times, granite was selected for the images of gods, the tombs of kings, for their statues and temples, and for the monuments of great events. And in their choice of granite for their purposes the ancients were not mistaken. To this day the monuments of Egypt are almost as fresh as if just from the sculptor's chisel.

As the cost of working granite gradually decreases, we shall see more and more of it used in architectural work. It will be used in numberless instances where the wind and rain beat, and where it is so admirably adapted to withstand these influences. In this way it might prove a permanent and enduring assistance to buildings composed in other parts of more perishable materials. Granite can now be obtained of so many different shades of color that any building stone can be found to harmonize with it easily. The sculptor has tried to use granite in his art, but its mottled appearance and often faulty composition are sadly against it for his purpose. It is needless to quote churches and buildings in this country in which granite has been employed in past ages. Nearly all of them show no symptoms of decay, but in some cases disintegration, or decomposition has taken place, and this from the selection of unworthy examples of stone, for it appears that there are some granites no more proof against the weather than the poorest limestones.

Hard and compact as granite appears, it is, nevertheless, sufficiently open and porous to admit a considerable amount of moisture. By absorption it will take up nearly 1½ per cent. of water, and where disintegration takes place it is owing mainly to this circumstance. In all stones that admit water, and all do, frost employs its terrific force and separates particle after particle till the surface is destroyed. Water conveys the chemicals which exist in the air to the interior, and by its solvent power, due in a great measure to the carbonic acid it contains, decomposes all stones. To judge of the great power exercised by carbonic acid gas as a solvent, it may be mentioned that all the silica that exists in the vegetable world (and no plant can grow without it) is derived from the stones and flints of the earth, and absorbed by the microscopic capillary cells in the roots, but the solid silica could not pass through these cells, and water, we know, will not dissolve flint.

How then is it to be accomplished? The rain that falls collects the carbonic acid of the air, and acquires the same from the soil through which it passes, and in combination therewith it dissolves the flinty rock and stone, and thus conveys the necessary support to the roots of all vegetation.

In the selection of granite for enduring purposes those in which the constituent minerals are most evenly proportioned are the best. Like small paving stones each particle seems to help the other, and the smaller the grain the more completely is this the case. Large crystals of feldspar are always objectionable on account of their readiness to decompose. For ornamental purposes almost any granites are available, many affording very rich combinations of color, and if the surface be polished the weather has less hold upon it and it lasts longer. If granite be totally submerged in water and never exposed, it will last unimpaired forever, thus showing that water alone, without the agency of air and decrease of temperature to the freezing point, will not materially affect it.—The Stonemason.

ORGANIZATION AS AN ADJUNCT TO THE BUILDING BUSINESS.

THE average business man seems fully alive to the value of system in conducting the details of his business; and seems to understand the importance of careful organization of all the parts in order that they may work together with the least possible friction, and therefore the greatest possible efficiency. He knows full well that disorganization and lack of system are certain to cause inefficiency and waste, and in exact ratio with the extent of their operation, cause a reduction of profits and loss of income; and still, except in very rare cases, the value of organization as a means of harmonizing the business interests of a community seems never to occur to him.

The customs that have grown into existence through neglect and disorganization in the building business are a constant demonstration of the crying need of organization, and yet the experience of the National Association up to the present time demonstrates the fact that builders throughout the country have largely failed to comprehend either the character, latent possibilities, functions, or results of organization.

Such local exchanges as have in any degree applied the true principles of organization which it has been the constant effort of the Association to define, have demonstrated in corresponding degree the value of organization, and, through the operation of such principles, have come to understand in a measure the benefits growing out of concerted endeavor; but in so far as exchanges have failed to apply these principles, they have demonstrated failure to appreciate the results which must inevitably follow their application to the conduct of business affairs.

Correspondence with the National Secretary is indicative of the fact that builders have so little knowledge of the benefits of organization that the subject fails to excite their interest unless some pressing need or emergency confronts them. Questions are daily asked, the answers to which were printed by the National Association five years ago, and placed in the hands of all its members individually, as well as in the hands of builders generally throughout the country.

In the minds of the majority of the builders throughout the country the value of organization is limited, apparently, to combination for the purpose of resisting attack by forces too strong to be controlled by the individual. In operation, builders have largely limited its work to affairs of the moment, and for the enforcement of conclusions in the main obstructive rather than constructive. The power in organization for the correction of evils which daily menace builders, and for defining the principles upon which their business should be conducted, thereby anticipating and obviating the difficulties which are now left for settlement till the friction point has been reached, is practically lost sight of.

The truth of the axiom, "Prevention is better than cure," is accepted the world over, and builders should recognize that in organization lies their only hope for the comprehensive and efficient application of this