“Dellwood Cemetery, Manchester, Vermont”


According to this article about the Dellwood Cemetery: “…The cemetery also displays some fine monuments, notably those of the late Mark Skinner and E. S. Isham. A fine tomb has just been completed for Mrs. B. F. Carver and is built mainly of Hardwick granite.” (quarried at Hardwick, Vermont)

“The entrance was a gift of Mark Skinner. On either side of the gateway…are two figures representing ‘Death’ and the ‘Resurrection;’ these are of the finest Italian marble…The same gentleman also completed…a very handsome stone cottage for the superintendent…. …” (A photo of the cottage is included in the article.)

& (Scroll down to the 2nd article on page 423)

“Foundations” (in Monumental Work)


This article on “Foundations” begins as follows: “in the erection of monumental work there is no generally accepted standard for foundations. Modern cemeteries have adopted rules and regulations governing their construction, but they differ so widely…. …”

This article, which begins on the next page, is presented on the Stone Quarries and Beyond web site. [http://quarriesandbeyond.org/](http://quarriesandbeyond.org/)

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Dellwood Cemetery, Manchester, Vermont.

This cemetery was incorporated by act of legislature in 1865, and through the munificence of the late Mark Skinner and E. S. Isham, of Chicago, and others, has become one of the most beautiful of the smaller cemeteries of the country. "Dellwood" is surrounded by mountains, the highest of which is 4000 feet. It is situated on a high elevation, almost the highest point on the highway for fifty miles. Its distance from New York City is about two hundred miles, and it contains about twenty acres. It was originally laid out by the late Burton A. Thomas of Albany, N. Y.

The main avenue, commencing at the entrance, winds artistically over the more elevated ground to the valley beneath, eventually bringing one to its starting point at the entrance. There are also many smaller avenues or walks for pedestrians only and these are probably unsurpassed in the country, winding as they do under the thick spreading branches of Birch, Beech, Elm, Maple and Spruce, and in addition, being within the sound of the clear rippling brook of mountain spring water which runs through the entire length of the cemetery.

At either end of the grounds there is a beautiful sheet of water, clear as crystal, which has been artificially made by damming the stream. Floating on these miniature lakes in summer are Nymph-
sum. Many vases have been set in the private lots,—some lots have two.

Greenhouses are connected with the cemetery in which plants are grown for summer use, some 10,000 being required annually. The cemetery also displays some fine monuments, notably those of the late Mark Skinner and E. S. Isham. A fine tomb has just been completed for Mrs. B. F. Carver and is built mainly of Hardwick granite.

The entrance was the gift of Mark Skinner. On either side of the gateway, standing on large pedestals are two figures representing "Death" and the "Resurrection;" these are of the finest Italian marble; back of these are two more pedestals surmounted by handsome vases in summer, while on the other two pedestals stand turned marble balls. The same gentleman also completed, just previous to his death, a very handsome stone cottage for the superintendent at a cost of $8,000, besides leaving to the Cemetery Association $10,000 to establish a fund. Dellwood has very few equals if any in the country for beauty and situation, and our city guests who are very numerous here through the summer greatly enjoy its natural and other beautiful attractions. What greater monument can any one have or desire than that of knowing he has by his means and influence, raised out of the old village grave yard, a living monument of beauty for the pleasure not only of the present generation, but of future generations?

G. S.

Foundations.

In the erection of monumental work there is no generally accepted standard for foundations. Modern cemeteries have adopted rules and regulations governing their construction, but they differ so widely that the builder in search of a standard, would doubtless be confused in attempting to discover any certain type that would meet all the requirements under all conditions.

Foundations are either good or bad; there are no medium grades. The object to be obtained in using them is to secure permanency and durability, hence any feature of them that is partially wrong must become wholly so; for a weak spot in the foundation will, in time, disintegrate the entire structure placed upon it. In this issue of the MONUMENTAL NEWS we present our readers with a few ideas illustrating the different methods used in constructing foundations, together with the good and bad points of each.

Figure A. represents a foundation used largely in country cemeteries, and is made of prairie or cobble stones of various sizes, laid dry to within a few inches of the top—a level bed being obtained with a layer of mortar. Many masons will advocate this foundation as being all right, but it is not. In the construction of this foundation the stones are put in at random, and are merely bedded into place with a blow of a heavy hammer or tamper. It is impossible to place each stone so that it has bearing on the one below, and when the crushing weight of the monument is applied to the top there is bound to be more or less settling; the top bed of mortar cracks in this process and the result is a failure. But admitting that you can place the monument on without settling the foundation, the open spaces between the rocks are receptacles for water, and above the freezing point there is bound to be an upheaval and a settling that will throw the structure placed upon it out of plumb. The difficulty in using cement mortar with this foundation is to get it thoroughly mixed through all the open spaces between the stones, and if only a few of these open spaces are left it will in time affect the permanency of the entire foundation.

The same argument can be used with equal force against the foundation shown in fig. B, which is constructed of random quarry stone of various sizes. These two foundations have been used largely in the erection of monumental work and they have proven failures and must be abandoned.

In fig. C, a foundation is shown that is faulty in construction rather than in materials. The cut shows the base larger than the top of foundation and slightly elevated above the grade line. A case re-
ently occurred in one of the Chicago cemeteries, in which a foundation of this kind was used and it caused an unlimited amount of annoyance. After setting the monument the earth was raised in a mound around the base, to close the aperture or opening underneath; each rain settled and washed away this earth, leaving an unsightly space. This operation was repeated several times but the earth could not be kept mounded up and it finally resulted in compelling the lot owner to raise the entire grade of his lot to the base line of the monument. Oftentimes this would seriously affect the beauty of a cemetery lot, as a couple of inches added to the grade of a lot after it has reached a proper grade would destroy its beauty entirely.

In considering a foundation, cost must necessarily receive attention, yet the small difference between the perfect and imperfect construction of the same should never stand as a factor against the good. Under the heading of perfect foundations we would class 1st.: dressed stone laid in cement mortar; 2nd.: concrete with stone top; 3rd.: vitrified brick with cement mortar; 4th.: stone piers and concrete filling.

To choose between these would be very difficult, for if properly constructed they will bear with perfect safety any load that can be placed upon them, and the adoption of either would depend largely on the convenience in securing the material and handling.

In the dressed stone, fig. D., care should be taken in the bedding and joints, and the latter should be broken regularly as shown in the cut. The concrete foundation, fig. E., is given a stone top for the reason that in handling a heavy base on it, if the concrete has not set perfectly hard it would be apt to crumble and crack were it not so protected. The concrete is made by crushing stone so it will pass through a two inch ring, and the foundation is commenced by placing a layer of it about six inches deep in bottom of foundation. Then take 1 part water lime cement and 1 part sand, mix dry and then add enough water to reduce it to the consistency of very thin mortar. Slush the broken stone full of this until it rises freely through the top, and repeat the operation until you reach a point that will be filled by placing on the top stone covering. Bed this stone in mortar and allow it to stand at least 2 days before placing the monument on it and the foundation will be found perfect and reliable.

In the brick foundation, fig. F., a good quality of vitrified brick should be secured, and each course laid in cement mortar, care being taken to break the joints as shown in cut. Put a heavy bed of mortar on the top and let it thoroughly set before using.

In fig. G. is shown a method of constructing a foundation so as to span a grave, or soil, that has been disturbed through digging or excavation. Sometimes it happens that a grave has been placed in a position that will not allow a foundation to be put down straight, of sufficient size to take the base of the projected monument. This can be overcome by building piers in the solid earth on either side of the grave, or base ground, and after passing the height of the burial box a solid stone is put across sufficient to span the space. The intervening space above is then filled with concrete. As a general rule foundations should be made about an inch larger than the ground plan of base.

Soils vary considerably in their bearing power, and a very good method of establishing a fine foundation in loose soil is to employ for a footing some coarse sand or clean gravel firmly compacted. Too much attention cannot be paid to the feature of good foundations and their general adoption will be the work of the next few years. The cost of foundations should be considered in the light of a permanent investment, and cheap work should be prohibited. Such work is usually unfit for durability.

C. T. Stickel.