

THE GRANT MEMORIAL TOMB, NEW YORK CITY.

THE DEDICATION AND PRESENTATION.

On Tuesday, April 27, 1897, the anniversary of the great soldier's birthday, the Grant Memorial Tomb was dedicated, amid stately ceremonies which called to mind the transfer of the body of that other soldier-hero, Napoleon I, to its resting place in the Hotel des Invalides, Paris.

The arrangements for the memorial services at the tomb included an opening prayer by Bishop Newman, who was General Grant's pastor and personal friend; an address by President McKinley, as the chief representative of the nation; an oration by Gen. Horace Porter, who, in his closing words, delivered the tomb into the keeping of the city; the acceptance of the tomb by Mayor Strong, on behalf of the city; and the singing of the Doxology by the assembled multitude.

Earlier in the morning the vast parade, numbering some 50,000 men, had started far down in the heart of the city on its long march to the tomb. It was headed by the military grand division, composed of 4,000 regulars and marines, 20,000 men of the National Guard, representing the various Eastern States, and 4,000 cadets. This was followed by the Veteran grand division, containing 10,000 men, and following this was the civic division, containing fully 10,000 more. Up the broad expanse of the Hudson River, below the tomb, there was meanwhile moving an imposing naval parade in four divisions. The first of these consisted of the North Atlantic Squadron and the foreign war vessels. The next was composed of other vessels of the navy and those of the United States Lighthouse Department. Then followed the revenue cutters of the government, and the last division was made up of vessels of the merchant marine. Altogether it may be said that the dedication ceremonies were worthy of the occasion, and will be recorded as one of the most memorable and splendid functions in the history of the metropolis.

Immediately upon the death of General Grant, which took place July 23, 1885, the question arose as to where his remains should be interred. The claims of Washington were set aside in favor of those of New York, mainly because of the wish of the General, expressed to his son in the last days of his sickness, that he should be buried in the latter city. In February, 1886, the Grant Monument Association was organized with ex-President Arthur as chairman, and up to this time contributions to the amount of \$114,000 had been received.

In September, 1890, as the result of a competition by a number of prominent architects, the plans of Mr. J. H. Duncan, of New York City, were adopted for the construction of the present handsome structure. The estimated cost was to be between \$500,000 and \$600,000. Work was commenced on the foundations on April 27, 1891, the anniversary of the dead soldier's birthday, and shortly afterward a contract was let for the first ten feet of the granite work. At this time only \$155,000 had been secured, and it was determined by the association, under the new presidency of General Horace Porter, to make a vigorous effort to secure the balance of the necessary money, or about \$350,000. An appeal for a popular subscription was made, and within sixty days the whole amount had been realized. The corner stone of the tomb was laid by General Harrison, who was then President of the United States, on April 27, 1892, and shortly after this, the funds of the Grant Monument Association had reached the handsome figure of \$600,000, or sufficient to carry out the plans of the tomb in their entirety. It was estimated that the total number of contributors during the sixty days was 64,788, each of whom gave on an average \$6.23. If the contributors to the original \$155,000 be added to these, it is found that the present memorial represents the personal tribute of fully 90,000 people.

The Memorial Tomb stands at the northern end of the beautiful Riverside Park, and it would certainly have been difficult to have found a more fitting site. The base of the structure is 130 feet above the Hudson River, and the summit of the pyramidal mass above the dome will be 280 feet above the same level. This commanding site enables the classic outline of the mausoleum to be seen over a wide area of the adjacent country, and the beauty and grandeur of the prospect from Riverside Park will render this hallowed spot doubly attractive to the pilgrims, who in future years will come from far and near to pay tribute to the memory of the great general of the Union armies.

The external appearance of the tomb is massive, dignified and sincere—and so far it represents leading characteristics in the man whose remains have been entrusted to its keeping. The lower half is square in plan, measuring 90 feet on a side, and is built on the

Grecian Doric order. The entrance, which is on the south side, is approached by a flight of steps 70 feet wide, which lead up to an imposing portico formed of two lines of massive columns. This is enriched with carvings of the coats of arms of the different States and designs of weapons and battle flags. It is ultimately intended to place a colossal equestrian statue of General Grant in front of the portico.

The large engraving on the first page shows the tomb as at present completed. The original design calls for the placing of equestrian statues of the four most prominent generals who served under Grant over four of the Doric columns of the portico. Others who held high command will be shown in bass relief in panels on the eastern and western sides of the building. The lower square portion of the structure is finished with a handsome cornice and a parapet at a height of 72 feet above the ground. Rising directly above this is a circular cupola built on the Ionic order, which is 70 feet in diameter, and is relieved by a handsome circle of Ionic columns and a gallery. The cupola terminates in a stepped or terraced pyramid, which it is ultimately intended to crown with an appropriate group of statuary. The design also calls for statuary at the four corners of the lower portion of the tomb.

The building is constructed throughout of a particularly flawless and durable granite, brought from North Jay, Maine. It is remarkably white and marble-like in appearance, and in the clear atmosphere of a sunny New York day is readily mistaken for the latter stone. The ground plan of the interior of the tomb is cruciform, the greatest distance between opposite walls being 76 feet. The corners are occupied by four massive masonry piers which serve to carry four coffered arches, that rise, at the crown, to a height of



THE HUDSON AND PALISADES NORTH FROM THE GALLERY OF GRANT'S MEMORIAL TOMB.

50 feet above the floor. Immediately above the arches is a circular gallery 40 feet in internal diameter, from which the visitor may look down upon the floor and the crypt below. The engraving upon the front page, which is taken from one side of this gallery, shows the general beauty of the interior design and the richness of the decorations. The gallery is lighted by windows which command a superb view of the Hudson River and the surrounding country. One of our illustrations is a view from this point looking up the Hudson. Above the gallery is a paneled dome, the springing of which will be noticed in the illustration. The spaces between the arches and the circular dome are decorated in high relief sculpture, which is emblematic of events in the life of General Grant.

Directly beneath the dome and in the center of the main floor is a circular opening, through which the visitor can look down into the crypt, in which is placed the massive granite sarcophagus containing the body. The crypt proper consists of an open circular space within which is a plain raised square granite platform upon one side of which rests the sarcophagus. The other side is reserved for a similar sarcophagus which will receive the body of Mrs. Grant, the General having expressed a wish that she should rest at his side. The circular space is inclosed by a low wall of marble, from which rise the massive marble columns which carry the ceilings and entablature, and behind these is the circular passage from which our photograph of the sarcophagus was taken.

Such is the Grant Memorial. Within as well as without, the design and details of this truly magnificent mausoleum are marked by an absence of all pretense and an unvarying directness and simplicity which form in themselves a fitting epitaph to the man who sleeps within.

Concerning Animal Industry.

A person unacquainted with the facts might be puzzled at first to conjecture what the functions were of a "Bureau of Animal Industry" in our system of government. Perhaps something relating to draught horses or the use of dogs in treadmills might suggest itself. In reality, this bureau is a subdivision of the Department of Agriculture, with the human animal performing the labor, which is largely that of the inspection of quadrupeds slaughtered for food, and it can display some remarkable figures to show its industry.

The prodigious number of 35,917,479 meat-producing animals thus underwent official inspection during the last fiscal year, as is shown by a report just printed. Of these, 23,275,739 were inspected at or for slaughter houses and 12,641,740 in stock yards, whence they went to the established abattoirs of other places, or else in the possession of buyers. The number was made up of 7,529,523 cattle, 314,846 calves, 6,318,284 sheep, and 21,754,826 hogs.

The figures thus given are of living animals, ready for slaughter, but last year there were also inspections, officially known as "post mortem," numbering 18,883,275.

The law on the subject covers animals slaughtered or to be slaughtered in the country for sale through the channels either of foreign or interstate commerce. Its enforcement has been a gradual work, as shown by the fact that the number of inspections was over twice as great last year as the year before, and that of the abattoir inspections six times as great as in 1892. What is more, there is to be a further increase of the inspection service, so that its figures will be still more enormous.

That the inspection is not merely perfunctory is shown by another set of facts. Last year the "ante mortem" inspections alone showed that there had been condemned, as unfit for food, 22,356 cattle, 2,837 calves, 13,225 sheep, and 50,981 hogs, making a total of 89,399 animals. These were marked with a condemnation tag, while those that passed muster had a tag showing that fact.

In regard to the 23,275,739 inspections at or for official abattoirs, it is noted that these represent nearly the same number of animals; but as to the 12,641,740 inspected elsewhere there must doubtless be some deductions, as the inspection is made at the scales, and the animals may change hands several times, being weighed on each occasion, and thus must pass the inspector more than once. But the total of different animals inspected must still be enormous.

Among the animals examined the highest ratio of condemnations was in the calves, nearly one in a hundred. The sheep represented only about one in 500, the hogs about one in 400, and the cattle about one in 360.

There was a heavy falling off in the exports of animals for the last fiscal year, and that makes the increase in the number of inspections the more

noteworthy. The exports of microscopically inspected pork fell off from 45,094,598 pounds to 22,900,880. But it should be observed that the preceding year had been an unusually heavy pork export year, and besides, there has been an intentional discouraging of microscopical work for countries not requiring that form of inspection, on account of the expense. The number of microscopic inspections the previous year had been 1,910,415, whereas last year it was only 979,380; still it cost \$60,486.

It takes almost a regiment of men, counting inspectors, taggers, clerks, microscopists, and laborers, to do all the work. There are examinations of imported as well as exported animals, and there are experiments on animals relating to their diseases. The expense of ante mortem inspections is put at \$341,456, or a little less than one cent each, while the total disbursements of the Bureau of Animal Industry were nearly \$600,000.

PROF. ALFRED M. MAYER, of Stevens Institute, gives in the American Journal of Science the results of a series of experiments with disks and rings of various kinds of metal floating on water. He refutes the theory that such floating metals must be greased, shows their breaking weight on the water when loaded, and the shape of the water surface, and deduces by methods of his own the values of the surface tension, which agree very closely with those determined by other physicists. Many interesting experiments are shown, as, for example, that a glass rod recently drawn out in a spirit plane and just cold sinks in water; after a freshly made glass rod has remained exposed for about fifteen minutes to the air, it floats; and if it has just sunk in water and is withdrawn, wiped dry, and exposed to the air from ten to fifteen minutes, it will float.

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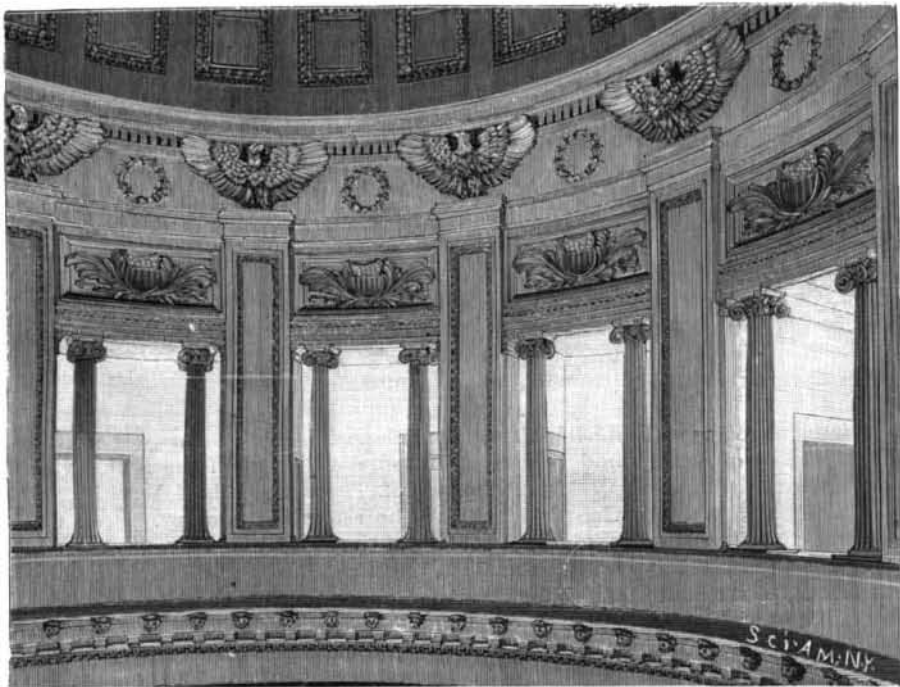
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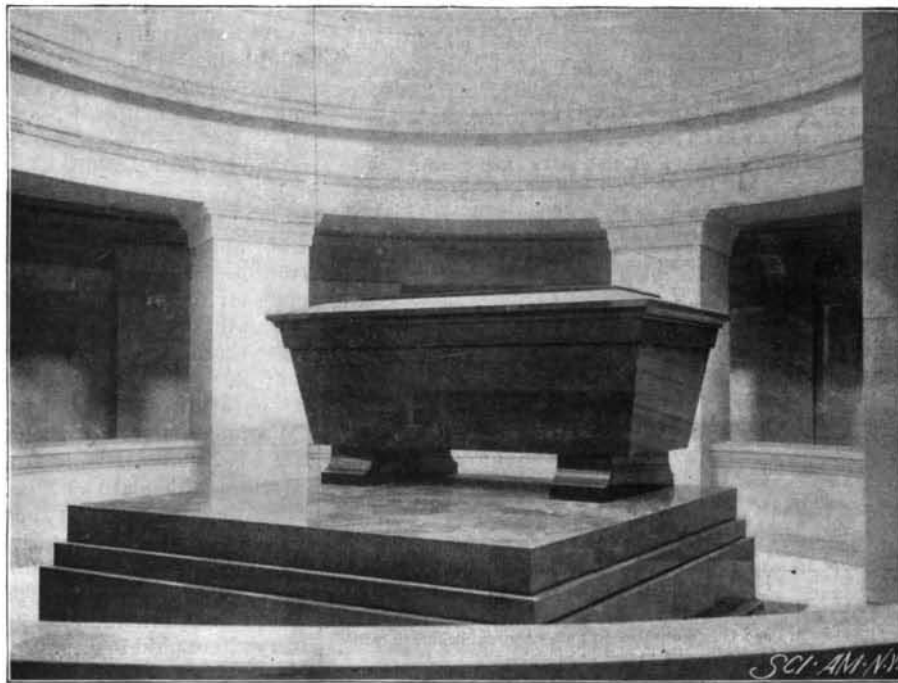
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THE GALLERY AT THE BASE OF THE DOME.



THE SARCOPHAGUS IN THE CRYPT.



THE GRANT MEMORIAL TOMB, RIVERSIDE PARK, NEW YORK.—[See page 279.]