

## MAJOR-GENERAL HUMPHREYS.

After giving a sketch of the organization of the Ordnance Corps, General Humphreys remarks:

The organization of that department was understood to have greatly improved the ordnance of the military establishment in all its branches.

Q. It affiliated with the Artillery Corps and was part of it?

A. Yes.

Q. Do you think the improved condition you mention is owing to the organization of the corps?

A. Yes, I think so.

Q. "As it the organization of the corps or the education they received?"

A. As to it, the organization of the corps contributed largely to the result. The investigations connected with its duties require a great deal of study. The improvement, of course, arose from both causes. I am unable to give each its due weight in the result. I know that the improvement has been very great. It is true that similar advances have been made during all this time in the armament of other nations, just as there have been great advances in all arts and manufactures, and industrial pursuits of every kind.

We place in italics so much of General Humphreys's testimony as seems to us to be a logical refutation of his opinion that the improvement was due principally to the organization, since the same improvement, or greater to it, places in other countries where the ordnance has not a separate organization. All that General Humphreys urges was urged with a greater force against the consolidation of the topographical engineers and engineers proper.

The cause of the improvement is much more easily explained.

## MAJOR-GENERAL HANCOCK.

Q. In your opinion what would be the property of consolidating the Army and Naval Ordnance Corps?

A. That I have not thought of. I may say here, however, if you think proper, that the only plan I can suggest would be to unite the artillery head and detail for ordnance duty artillery officers from time to time.

Q. What would be your recommendation for the management of the Artillery and Ordnance Corps if they were combined?

A. I have not given the subject that kind of thought that would enable me to express any valuable opinion on it. I believe, however, that a wise combination might be made of the artillery officers and those necessary to select for ordnance duty. Whether the business of fabrication should be continued in connection with the Ordnance Department, or whether it should be done entirely by contract, is another matter to be considered.

Q. So far as taking care of the arsenals, and keeping arms, and the protection of property are concerned, is there any reason why intelligent artillery officers might not be detailed for that duty?

A. I see none. If there is any special knowledge required in taking care of an arsenal, it is a matter of education, and officers of the Ordnance Department have to learn it just as the artillery officers would. The artillery officers when first detailed for this duty would know as much about it as those belonging to the Ordnance Department when first detailed.

Q. Have the ordnance and artillery ever been together?

A. Not to my knowledge; but there has always been an attempt to bring them together in my time. The artillery have felt that they ought to have more control over the ordnance which they have to use, and there has been a disposition to consolidate the corps for many years. The artillery claim that they are a scientific corps, and that the ordnance should belong to their department. That question was agitated many years ago, probably the war stopped the agitation, but it existed before the war, and has been renewed since.

## MAJOR-GENERAL McDOWELL.

Q. What is your opinion as to the propriety of consolidating the artillery arm of the service with the Ordnance Department?

A. If you had asked the question as to whether a corps could not have been constituted that would do these two services better than the present two organizations, I should say, yes.

Q. Give your reasons for this.

A. We have now a body of officers—artillerists—who have no lot or part in the device of the artillery and munitions they use, and a body of officers—Ordnance Corps—who do not use, or whose duty it is not to use the guns and projectiles and munitions they make. This, it is true, applies, but in far less degree, to the other arms of the service; but in the artillery good should come of there being a closer connection between the theory and practice of the art than exists. In both the English and French service the ord-

nance and artillery—such as the latter is with us—from one corps.

Q. Were they ever so in our service?

A. In the Mexican war General Scott used the ordnance officers in his siege artillery; they also served in the light battery. [General McDowell might have added, while in the artillery officers whose places were thus taken were serving as infantry.] I find we have had an Ordnance Department in which officers of artillery were on duty at arsenals. We had no light artillery at that time; nothing but heavy guns on the seaboard fortifications. We did not have the light artillery until 1858. There are many inconveniences in having the ordnance and artillery distinct, but it has also its good side; there is also a good deal to be said in favor of it.

Q. Has this question ever been debated in the Army?

A. Yes, to a considerable extent. The artillery men mostly desire it, but the Ordnance Corps oppose the consolidation. They command their own arsenals and report only to their own chief in Washington; they have their appropriations and construct all their own buildings, and the consequence is, you see the ordnance establishments are very much better than any other part of the service. They have a very strong esprit de corps, and would very much dislike to see themselves merged into any other branch. [The difficulties I see in the way are more of a personal nature than anything else. You get considerable advantage in keeping a man or some special subject. But as the making of ordnance is not the end, but the means, and the effective use of what is prepared requires now in no time ever as much ability as the preparation, I think the artillery should be raised to as high a degree of excellence as the ordnance.]

[Perhaps the esprit de corps of the ordnance is explained by the following figures given by General McDowell, taken into account with what he says about the "ordnance establishments":]

The proportion of field officers to all grades in the ordnance is 17 to 81, or 1 in 3.13-17. In the artillery, of 52 officers, there are 5 field officers, or 1 in 10.2-3.

[The artillery has neither the benefit of fine "establishments" nor rapid promotion, and has preserved its esprit de corps rather by lack of than through excess of favor.]

## MAJOR-GENERAL GEORGE H. THOMAS.

Q. Please give the Committee your judgment on the propriety of consolidating the Ordnance Corps with the artillery?

A. I should prefer it as it is, because the preparing of ammunition, and storing of ammunition and furnishing ammunition are all special services; and it is not natural to suppose that an officer detailed temporarily to do such duty would take so great interest in it as one who had been appointed to the position on account of his scientific attainments. The latter would take special pains, not only to keep himself up to the mark, but would endeavour, as far as possible, to improve a person only engaged temporarily, in a thing will not take so much interest in it as one who is engaged in it permanently. [General Thomas has here given the argument usually relied upon as conclusive against consolidation. It is fully answered by the fact that our organization is exceptional to that of all other great powers, and it cannot be maintained that we are benefited by the exception. And that ordnance officers, as a body, are ordnance officers by reason of possessing any greater scientific attainments than may be found under parallel circumstances, in a like number of artillery officers, we do not admit. That service in the Ordnance Corps is calculated to develop certain intellectual faculties which may not be equally exercised in the artillery may be true; and it is this opportunity which we seek as a right.]

## GENERAL RUFFS INGALLS.

Q. What would be your opinion as to the propriety of merging the Ordnance and Artillery Corps?

A. Never having served in either, and not being able to give any reasons, I probably ought not to give any answer. I should say, from the experience and knowledge that I have on the subject, that there would be a great deal of propriety in merging them.

## MAJOR-GENERAL SCHOFIELD.

Q. Please state to the Committee your opinion as to the propriety of consolidating the ordnance and artillery into one corps?

A. As an original proposition in the organization of the Army, I would not hesitate to say that the ordnance and artillery should be one corps, because their duties are so intimately connected. To make an officer efficient as an artillerist, he ought to have the advantages which an ordnance education will give him. There may be a practical difficulty in the consolidation of the two branches under the existing circumstances. The two having been separate, the standard of qualification for artillery officers has been much below that of the ordnance service, so that in fact the great proportion of artillery officers

would be quite inefficient as ordnance officers; and if they were consolidated, therefore, it would not be found expedient to assign artillery officers to ordnance duty, except to a limited number, from the entire corps.

Q. Are ordnance officers, on the other hand, qualified to act as artillery officers?

A. As a rule the ordnance officers would very soon qualify themselves to act as artillery officers. As a corps they are very superior officers.

Q. Are the duties of the two corps sufficiently similar to make it practicable to adjust these difficulties which you suggest, in case of consolidation?

A. I do not think there would be any lack of efficiency in consequence of consolidation.

[It is evident from General Schofield's last reply, that the practical difficulty he suggests does not carry great weight with it in his own eyes, on the contrary, his remarks furnish one of the strongest arguments for consolidation. It is not to be supposed that the head of the consolidated corps would assign incompetent officers to duty in the Ordnance Department. There might be but one officer fit for the assignment, and there might be a score. Be the number few or many, it would certainly begin to increase rapidly from the very instant of consolidation. Artillery officers would strive to qualify themselves for the new duties, and ordnance officers would strive to qualify themselves better for their old duties. The standard of admission would be higher and uniform, and the artillery would stand for the first time on firm ground, with inducement and opportunity for progress.]

Pending a reorganization and union, our corps should be fairly represented on all boards appointed to take action on any subject pertaining to artillery. The Chief of Ordnance has recently been in the habit of giving the artillery representation in certain boards, but it is not enough that the rule should be permissive only; it should be obligatory. It may be said with truth that the cavalry and infantry should also be represented, when matters pertaining to those arms are under consideration, but our concern just now is for ourselves. The Chief of Ordnance has recognized the principle involved, by his voluntary and liberal action in this respect, and all we ask is, that our representation may be authoritatively recognized as a right and not a privilege.

Not only on the boards convened for the consideration of matters specially relating to the artillery should we have a place, but also on the mixed experimental boards for testing the relative powers of attack and defence. Our interest in the question cannot be considered remote, since whatever may be the decision arrived at, we will have to put the theories to the actual tests. It is true that certain officers of artillery have been invited to witness the experiments, but here again it is a courtesy and not a right.

In dwelling upon our connection with the ordnance, let it not be thought that our relations to the engineers are too unimportant for comment. There is here much food for reflection; but we will do no more at this time than to enter our protest against the depreciated estimation in which our arm is practically held by the Corps of Engineers, and to assert our absolute and intimate connection with the high science of which that corps assumes to be the sole exponent. This much we do because we strive to have the artillery appreciate and assert its true dignity.

Now that the whole system of fortifications is, as it were, at sea, and new questions presenting themselves for settlement faster than the old ones are disposed of, it is possible that even an artillery officer might be a useful member of a fortification board.

So far as may be gathered from hearsay,