

SUPPLEMENT TO THE TECH

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WILLIAM BARTON ROGERS.

As Seen by an Old Pupil.

AN ADDRESS DELIVERED BY FRANCIS H. SMITH, M.A., LL.D., PROFESSOR OF NATURAL PHILOSOPHY, UNIVERSITY OF VIRGINIA, AT THE COMMEMORATIVE EXERCISES OF THE ONE HUNDREDTH ANNIVERSARY OF THE BIRTH OF TECHNOLOGY'S FOUNDER.

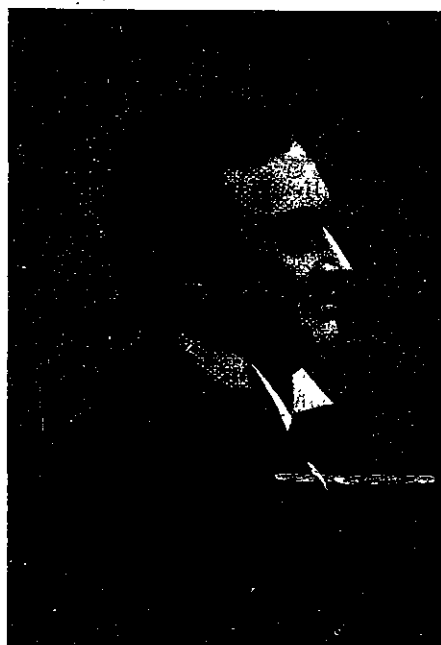
I have no formal commission, Mr. President, to represent the old pupils of Professor Rogers, who are scattered through the South. They are gray-haired men; their number is rapidly thinning out. But there is one name at the mention of which their faces brighten as they recall those happy days, half a century ago when they sat at the feet of the great teacher, and heard those unrivalled lectures, sentences from which they can yet repeat to admiring listeners. If they believe that he has left behind him no equal, who that knew him can blame them?

It may be questioned whether a man's pupils or immediate associates are the best judges of his merits. It may be with great men as it is with great mountains. It takes both the near and the far view to know them well. The distant survey reveals the great outlines and the relative height. The near view discloses the massive grandeur and the individual traits which are lost to the far-off spectator. The tourist, on the Rigi, admires the Alps. The Swiss mountaineer loves the Alps. Some of us have had both views of Professor Rogers. With the rest of the world we have marked his public acts and his appearance in the great arena with the scientific leaders of his time. We also knew him in the class room and in his home as pupil and friend.

I well remember the first time I ever saw him. He had just returned from his wedding trip in Europe, bringing with him to Virginia one of the fairest daughters of Massachusetts, who for four happy years graced our academic society with her charming presence.

In the unconventional and uncere- monious style of college boys, we gathered at his door to welcome him home. Then for the first time I listened to that easy, delightful eloquence, which, whether addressed to boys or men, always rose above the occasion.

More than fifty years have rolled



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away, yet Professor Rogers is still a living force with us. His name is carved on one of our buildings. His portrait looks down on our students in our chief hall. His bust is in our Physical Laboratory. Apparatus which was used by him, and experiments devised by him are exhibited year by year, and never without respectful mention of his name. That name is a house-hold word in the School of Geology. His fame is one of our college heirlooms.

I have called him a great man. May I tell you why we thought him so then, and why our estimate of him, formed in youth, was enlarged and confirmed in after years?

Mr. Rogers (so we called our professor in Virginia; we still speak of Mr. Jefferson and Mr. Madison). was a great man because he was a great teacher. Ordinary teachers are common enough. Great teachers are few, and in every age constitute the real aristocracy of our race. To be such a teacher gives play to every power of the human mind and heart. Well-digested knowledge and the power to impart it are the lowest of its demands. Imagination, sensibility and self-control are inevitably needed, while reigning over all must be that love of truth which disdains to tickle the ear with a falsehood, and that love of man which prefers his future respect to his present applause.

Mr. Rogers never came to his classes to perform a perfunctory

duty. He respected his young auditors. He told me once that he never rose to address them without a certain trepidation. No fear of them, but respect for them and the truth he had to speak. He was of Juvenal's faith, "*Maxima reverentia debetur pueris.*" Only great characters feel this; it is absurd to little men.

In power to make difficult things plain, he was unequalled by any other teacher I have ever known. His capacity for luminous exposition was really extraordinary. I have heard such excellent instructors as Courtenay and Bache speak with admiration of particular instances of his rare excellence as an expositor. At his touch complex subjects became simple and dark things bright. It was a memorable epoch in my own intellectual life when I first listened to his presentation of Newton's argument for universal gravitation. Joined to this rare gift of lucid expression was one which I have always ventured to place second among the elements of his greatness, although it was generally mentioned by his youthful admirers first. I refer to his high rank as a speaker. His eloquence was not labored or memoriter or ever turgid, but simple, easy, correct and inspiring, growing naturally out of his subject. His imagination was always subject to his reason, and was never allowed to take the rein. A simple happy epithet would often illuminate a

whole paragraph. When occasionally he would give play to a chastened fancy and afford his young auditors a relief from mental tension by a rhetorical sentence, as I have heard him say he sometimes did, of set purpose, then would roll out on our delighted ears a strain of elevated, captivating utterance, so felicitous that it is remembered to this day. Not only boys, but men were everywhere captivated by his remarkable platform power. At a British Association banquet, after a long line of speakers, he rose last of all before a weary audience. After a few sentences all were alert and alive; the tired company grew fresh again, and he sat down the winner of the honors of the evening. I have sometimes fancied that he owed this gift to the land of his ancestors, the beautiful island which has produced so many orators; which gave to Parliament a Burke, and to Physics, a Tyndall.

To these qualities of a great teacher Professor Rogers added the passion and capacity for original investigation. The great teacher cannot be a mere mouthpiece for other men. He must know books, but he must know more. As the interpreter of Nature he must hear her voice for himself.

Education is a "leading forth;" the leader must go before, and go farther than his pupil. Mr. Rogers had a singular power of penetrating to the truth of things through the disguises with which Nature hides her secrets from the careless or superficial. This was remarkably shown in his work in his favorite science of Geology. Here he was a pioneer. In those early days geologists were largely confined to surface indications; railway cuttings, tunnels, artesian borings were almost unknown; yet such was his insight that subsequent explorers have often confirmed the conclusions reached by him from data meaningless to other men, and Virginian geology has grown on the lines laid down by him.

He possessed another quality which is generally thought to be rare among scholars. The public does not look to them for managers or administrators. The power to make wise plans and to bring things to pass is an admirable one, by whomsoever displayed. This power he had and exhibited in two events of his life. He began the geological