

THE WORK OF THE ACADEMY

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Several years having elapsed since the publication of an official organ by the Academy it is fitting that a few words be said about the past work of the organization and of the fertile field of activity that lies before us.

In March, 1912, a small group of Tennesseans, of studious and scientific inclination, met to consider the formation of an organization wherein they might meet on common and congenial ground, with others who were pursuing scientific studies. Educators, doctors, professional men and laymen, scientifically inclined through vocation or avocation, were invited to join together to form a Tennessee Academy of Science and thus give encouragement to its workers and tangible evidence to the public that our State could contribute its quota to scientific progress. At this meeting there was no faltering step and so the Academy came into existence and has carried on these fourteen years, always striving to carry out the purposes for which it was created. Its officers have been chosen from all parts of the commonwealth, including our principal educational institutions, thus bringing into actual contact a group of men who have quietly and studiously contributed much to human knowledge and welfare. The specific contributions which these men have made is frequently difficult to perceive from the standpoint of the layman, for often the most zealous work of a scientist will produce only a link toward finishing some chain of facts, a mere stone in a foundation as it were, or an idea perhaps which his co-workers had failed to conceive. And thus, for instance, when we see triumphantly announced that some obstinate human ailment had at last been conquered or some great invention had been consummated, we must stop to contemplate that the way had been paved to final success, step by step, by the work of many scientists, co-relating and amalgamating the discoveries and knowledge of thousands perhaps who had gone before. No human mind can encompass more than a fragment of the knowledge that exists at this time in printed form and therefore the great material progress of the present day has been achieved by specialists—scientists if you please—reaching far out into the paths and by-ways of human knowledge, co-relating and linking up the discoveries of scientists who have worked before them and finally, emerging with such discoveries as radio, electricity, the X and other rays, serums to combat disease and an untold number of useful products of chemistry and electrolytic energy. The composite mind of the scientific world is so vast and its ramifications so extensive and far-reaching, that it is almost as difficult to conceive as to grasp the extent of the solar system. Every department of scien-

tific activity has its literature, volumes and volumes cover the findings of those who have worked in each division and sub-division, journals covering each specialty are being published and organizations being effected so that these specialists may meet, coöperate together and, hand in hand, reach far out beyond the charted trails of human knowledge, like the explorers who push on far beyond the beaten track in their search for the poles. Since no human mind can embrace and co-relate all this vast store of knowledge, human progress will necessarily go on step by step, slowly at times but ever forward.

And so our small group of scientists in Tennessee may be laying unaware the foundation stones upon which some great scientific discovery will yet be built; likewise they share equally the opportunity to gather together the work of other scientists and, by capping them off as it were, achieve some useful result. The mind of the scientist is necessarily the analytical mind. Just as the gifted mathematician or engineer takes all the factors of an intricate problem and carries them forward through a maze of calculations, each of which he analyzes and verifies as he goes, finally eliminates all of the unknowns and blazes his way through the correct and desired solution, so do his brother scientists prosecute their work. They take nothing for granted that does not stand the test of reason, they carry their work forward, stepping only on the firm stones of proved facts and, if they must necessarily cross a bridge of unfirm foundations, they question their final result until they have gone back and analyzed this unstable footing.

The term scientist is indeed a broad term, a glance over the names and activities of our members show how extensively the term may be applied and still our activities are but a fraction of the whole. Scientific work holds great fascination for the studious and well trained mind. As education of the masses advances it holds an ever increasing interest and appreciation of the public at large. This is evidenced by the increasing amount of space being assigned in our newspapers and periodicals to items of scientific interest. It is a most hopeful sign to observe this trend and the corresponding decrease of space allotted to politics. It shows that our people are becoming more and more interested in thinking for themselves and are becoming less inclined to be lead about by noisy clamor.

And so, the personnel of the Academy would do well to take stock of the work they have accomplished to date and lay out a definite program and goal for their future activities to the end that they may make substantial contribution to human progress and knowledge and make readily available their work for others to build upon. This journal is being launched for no more laudable purpose than to kindle and stimulate the interest of our local scientists in their own work and in the work of their fellows and to make such record as our space will permit.