selves. I was in hiding behind a tree about fifteen yards from them looking at them, when I saw an elephant with four tusks as roughly represented in the attached sketch.

The left tusk was the bigger and had the usual direction, but the direction of the small tusk was downwards and came out from under the big one. It was round, and its thickness was about 2½ inches.

The direction of the right tusk was downwards and the small tusk came out from under it in the usual direction, but it was small like the other one.

I did not know that this elephant was so valuable and for this reason I did not try to shoot it, although the Ombashi and the soldier who were with me told me to shoot it, but I refused. This is all the story.

Abd El-Farag Ali, M.A.

Yambio,
February 17, 1919

QUOTATIONS

THE WORK OF THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

Your leading article of this morning expresses some dissatisfaction which even those who have best cause to be satisfied with the recent meeting will readily share. You sneer at the "vast sum" of £1,300 provided for research at the outcome of the meeting. We all share your obvious wish that it were much larger, and the treasurer especially made that desire clear at one of the evening meetings. Any hint you may give us how it may be increased will be gratefully received. Meanwhile it is possible that its exact significance is not fully understood. It represents, so to speak, the extra charges for heating and lighting when a big factory is run overtime by voluntary workers. The main expenses of the scientific organization of the country, including the salaries of professors and demonstrators, are met in quite other ways. Some members of ths large staff find that they have time and energy to work overtme—to conduct some research which has occurred to them as desirable if only a piece of apparatus can be provided or the expenses of a series of computations met. They ask for no addition to their salaries for this work, though such additions could in many cases be reasonably defended. They come to the British Association only for out-of-pocket expenses. The value of the work thus done is enormous, and if fully remunerated would represent a sum many times greater than that actually devoted to it.

It follows that there is a limit to possible expenditure of this kind. I do not mean to suggest that has been reached, but clearly the unpaid overtime obtained from a given staff has its limits. There comes a point at which more work can be got only by adding to the staff, and at this point the British Association generally hands over the matter to some other body. Thus the beginnings of our Great National Physical Laboratory, now added to the scientific resources of the nation, may be traced in the earnest but unassuming work done by the British Association many years ago when in your own words "some of the best brains in Great Britain met in solemn conclave to allot the vast sum" of about £1,000, only a fraction of which could be devoted to the fundamental work of fixing accurately the electrical and other standards. The war has accustomed us to the huge sums which are apparently available for destruction: it is a commonplace that the beginnings of the most important constructive work are usually small. Is your sneer altogether appropriate?

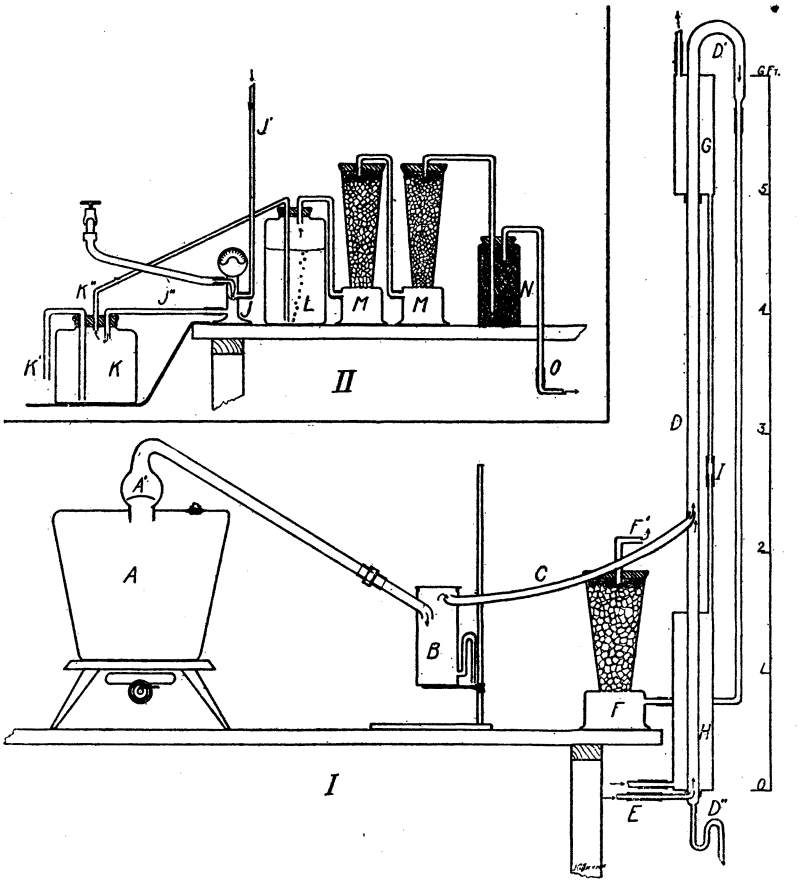
With your suggestions that the camp followers should be dismissed and the discussions specially directed to the "technical methods on which the progress of science depends" I do not find myself altogether in sympathy. We owe much to the camp followers, even beyond the money they provide for research; and the experts can meet at the Royal Society for technical discussions. But I scarcely know whether you would welcome a reconsideration of the declared objects of the British Association in your columns: at any rate, I hesitate to enter on so large a field without some indication of permission. On the point you consider most vital, that the Association should "insist on the advancement of science simply as knowledge, and not merely as a means to practical utilities," we are all fully agreed, as a glance

at the most vital procedure—viz., the allotment of grants—will sufficiently indicate. If some of the accessories have a different appearance, surely allowance may be made for the disturbance caused by the greatest war in history?—H. H. Turner, General Secretary of the British Association, in the London *Times*.

SPECIAL ARTICLES

THE BOURDILLON WATER STILL

THOSE who wish to obtain an abundant supply of "conductivity" water may be interested in a distilling apparatus which has been in use in this and other departments of the University of Wisconsin for the past few years. This still was originally described by



EXPLANATION OF FIGURES

FIG. 1. Steam Generator and Boiler. *A*, boiler, 15-liter capacity, copper; *A'*, dash plate; *B*, trap with removable lid, copper; *C*, lead to condenser, ½-inch diameter, block tin; *D*, condenser-tube, 6 feet long, 1 inch inside diameter, block tin; *D*, outlet for escaping gases, block tin; *D''*, outlet for condensed water, block tin; *E*, inlet for washed air, block tin; F, soda-lime tower and H_2SO_4 in pumice tower (the figure shows but one jar); *F'*, outlet to out-of-doors; *G*, upper condenser jacket, 12 inches long, 4 inches diameter, copper; *H*, lower condenser jacket, 18 inches long, 4 inches diameter, copper; *I*, rubber connection serving as expansion joint.

FIG. 2. Air Pump and Wash Train *J*, aspirator; *J'*, air inlet from out-of-doors; *J''*, water and air outlet of aspirator sealed into top of jar; *K*, pressure jar; *K'*, water outlet of pressure jar *K*; *K''*, air outlet of pressure jar *K*; *L*, wash jar containing commercial H_2SO_4; *M,M*, soda-lime towers; *N*, dust filter of cotton-wool; *O*, washed air outlet connecting with *E* of Fig. 1.