distributing one thousand copies of the first reprinting of the article.

C. STUART GAGER

THAT CHEMICAL SPELLING MATCH AGAIN

So much has been said and written about this subject since my first note appeared in SCIENCE September 29, that I am going to make a further suggestion along the same line.

Requests have come from different universities for details regarding the match, as well as for a list of chemical formulæ which we used in connection with our spelling match. Only one such list could be supplied, however, but if enough interest is aroused in the matter, I shall endeavor to prepare a much larger and more comprehensive list, which might eventually be published in book form.

Much valuable information about a substance is contained in its chemical formula. Therefore, the ability to ascribe the right formula to a given substance, without consulting the literature, is an accomplishment coveted by all chemists.

Formerly competition was the life of trade, but this desirable quality has gradually disappeared as the combining power of the traders developed. Competition, however, remains the motive power in the life of nearly every student, and the chemical spelling match offers one of the best opportunities for spectacular competition in the field of intellectual pursuits.

There is no danger of ever exhausting the supply of formulæ in any chemical spelling match. Even if the "walking encyclopedias" that we hear so much about should get into the contest they would doubtless be spelled down before the hundredth part of the words had been pronounced. Nevertheless, it would be interesting to know who the All-American champion chemical speller is.

Should the subject elicit sufficient interest the country could be divided into twenty-four or more districts and all higher institutions of learning within each district compete for first prize; and then for the semi-final contests the winners in the northwest districts would assemble and spell for the championship of the northwest, and in like manner a champion would be selected from the southwest, one from the southeast, one from the northeast, one from the north central, and one from the south central districts. These six winners in the semifinals should then meet for the national championship battle.

Should the contests prove as interesting and valuable as anticipated, Canada, Great Britain and Australia might want to send representatives to the final matches. Eventually we might even go farther than this. The chemical formula is the same the world over, and there is no reason why chemistry students all over the world should not have an opportunity to compete for so unique an honor.

The general establishment of these contests would stimulate the study of chemistry everywhere, and would therefore mark a long step toward greater efficiency in teaching as well as research. The details of these spelling matches would of course be worked out as the subject develops. It would appear that, in the selection of the winners in both semi-final and final matches, no one should be declared a winner who had not won at least three out of five contests with his opponent.

We have our world's champion boxers, tennis players, scullers, runners, jumpers, vaulters, etc., and would it not be in keeping with the march of events to establish an intellectual event of this sort which combines the elements of sport and usefulness.

Spelling matches could not be supported by the gate receipts, and in order to defray the expenses of the contestants, other means of support would have to be provided. This and numerous other details would be handled by a committee. As chairman of such a committee I know of no one who would be more suitable than Dr. Edwin E. Slosson, of Washington, D. C.

If he would consent to serve in this capacity I should confer upon him this high office, with all the honors, rights and privileges thereunto appertaining.

Make the reward for this championship large enough and contestants will come from all the leading countries of the world. Aye, they would come From Greenland's icy mountains,

And from India's coral strand;

From Africa's sunny fountains,"

And from Russia's benighted land.

WANTED—A Scientific sport who will establish a prize for the World's Championship in Chemical Spelling.

MORGANTOWN, W. VA.

C. A. JACOBSON

A SCIENTIFIC CLEARING HOUSE

A PERSONNEL file for American investigators in the biological and physical sciences and their related technologies has been established in Washington, D. C., by the Research Information Service of the National Research Council. This directory of living research workers now lists approximately 14,000 names. A report describing the whole project, with illustrations based upon the personnel records of American psychologists, has just been issued as Bulletin Number 22 of the Council.

When these files were started, some two years or more ago, it was believed that such a record of research workers throughout the country and their scientific activities would, when classified, be widely useful; and experience has shown that through the system installed, facts as to the characteristics, interests and research activities of investigators can be expeditiously assembled.

As now organized the personnel file contains records of investigators in the following major groups of science and technology: (1) Agriculture, (2) Animal biology, (3) Anthropology, (4) Astronomy, (5) Chemistry, (6) Economics and statistics, (7) Education, (8) Engineering, (9) Geology, (10) Geography, (11) Mathematics, (12) Medicine, (13) Plant biology, (14) Physics, (15) Psychology. Several of these groups have been further subdivided as need has arisen. The files of records for economics and statistics and for education remain to be developed, but the data for investigators in other fields are now in useful form.

The original records of these investigators are supplemented by a mechanical punch-card system (Findex). The original file, arranged alphabetically, is consulted for information about any investigator whose name is known; the mechanical file, classified by subject, is consulted for names of investigators having prescribed qualifications. Through this punchcard system it is the matter of but a moment to obtain from any of the major groups a list of people of specified age, experience, achievement, research interest, and so forth. By a single operation selections of names of those meeting any required research specification or combination of specifications can be made.

The usefulness of a comprehensive catalogue mechanically operated for obtaining names of specialists is almost too apparent to need mention. But the personnel file promises to function even more widely and efficiently as a clearing-house for research people who wish to communicate with one another about common or related problems. With a minimum of time and effort the Research Information Service has frequently been able to furnish a half dozen references to current investigations related to that being carried on by some isolated investigator. Such contacts bring mutual advantages and are in accordance with a growing movement to encourage coordination rather than duplication of research. The overlap of activity, too, in the various sciences makes evident the usefulness of such a central clearinghouse.

A personnel service specializing in living sources of research information is no less important than a bibliographic service specializing in printed sources. Neither can replace the other but each has its place in helping to furnish a foundation for science and research. Both types of service are rendered by the Research Information Service. Those in need of either kind of assistance are invited to write to Research Information Service, 1701 Massachusetts Avenue, Washington, D. C.

HAROLD C. BINGHAM Assistant Director,

RESEARCH INFORMATION SERVICE.

QUOTATION VOLUNTARY STUPIDITY

EXPRESSING the conviction that any legislation attempting to limit the teaching of the doctrine of evolution would be a "profound mistake," the American Association for the Advancement of Science, at its opening session on Tuesday, at Cambridge, Mass. (the seat of