the Old Americans shared with a community of English families and with Pennsylvania Germans and Germans from the fatherland. Before all the forest land had been taken up, the new steel plow made the prairie available, and families from New England, New York, Pennsylvania and Germany joined forces in the rush to enclose it. Here and there a group of Irish took root on the prairie, but most of them were relegated by their poverty to the rougher forest lands which no one else had wanted. By the time the Irish and the Scandinavians were coming in force, they had to purchase farms from the children of earlier settlers, since little land remained in the hands of the government. Many of them settled in the towns. Before settlement was complete, all these racial threads were being interwoven into a harmonious fabric of Americans. This process still goes on, with Italians and Lithuanians as the chief strands of later origin. Most of them are city dwellers.

While there was abundant land the different groups clustered in tight neighborhoods, each linked to a different place of origin. As soon as clannish feeling diminished with the passing of the first generation, and all the land came to be occupied, the lines between settlements began to fade. Before 1900 the disappearance of stumpage in the forest and the planting of shade trees on the prairie had minimized the striking contrast in aspect of the landscape which had guided settlement. Intermarriage and interlopers were speedily obliterating the social lines which had formerly distinguished neighborhoods. But just as the natural vegetation has left tell-tale traces in the soil, so relicts of the original settlement—denominational churches, varying styles of farmstead architecture, the predominance of surnames belonging to this or that language—indicate to the observing eye something of the origins of settlement on what is now a typical piece of Midwestern America.

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OCTOBER 3, 1934

A NEW OUTLET FOR UNABRIDGED SCIENTIFIC PAPERS

THIRTY years ago it was not uncommon to find scientific papers forty pages long or even longer. Because of the increase in the number of papers submitted, editors nowadays are compelled to impose strict limitations on the length of each. Yet, because of increased specialization, the need for an efficient medium of interchange of detailed information, between workers in the same or related fields, is greater than it was ever before.

Several solutions of this problem have been proposed in the past.[1] They have a drawback in common—they require the concerted action of many scientific bodies, as well as a radical change in the present methods of publishing scientific papers. These features in a plan make it highly improbable that the plan will be adopted in the near future.

I should like to have the opportunity of presenting through the medium of your journal a suggestion for the partial solution of this problem. This suggestion eliminates the difficulty mentioned in the preceding paragraph and allows of experimentation on a small scale.

The proposed procedure is somewhat as follows: Let the investigator write a paper of a length sufficient to make it useful to his fellow workers. Let him mimeograph his work and send copies to twenty-five key libraries of the world. Let him then present a condensed summary for publication. The summary is to contain a complete list of the libraries in which the unabridged paper is to be found.

I wish to emphasize that the present plan introduces no startling or new ideas. It represents a synthesis of several separate old ones. It seems to me that it is practical and that it will make unabridged papers equally as accessible as short papers published in the less widely circulated journals.

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SCIENTIFIC BOOKS

EARTH, RADIO AND THE STARS

Earth, Radio and the Stars. By HARLAN TRUE STETSON, Ph.D. New York, Whittlesey House, McGraw-Hill Book Co., Inc., 1934; pp. xvii + 336; figs. 88; one colored plate.

A PUBLICATION describing and coordinating the intriguing phenomena of astronomy and those of the earth sciences, more familiar but unfortunately the object of less interpretation, has been a desideratum for some time. The wonders of the heavens and the enchantment of the great unknown represented by the distant celestial bodies have long been the subject of discussion both scientific and popular. It is surprising that the even more complex and certainly equally fascinating physical phenomena evidenced by the experiments performed daily by nature in her great laboratory—the earth and its atmosphere—enlist, in general, little interest from layman and scientist alike. In astronomy there has been no lack of interest from its early beginning. But the intimate relations to the

[1] See, for instance, SCIENCE, 56: 197, 1922; 80: 70, 1934; 80: 245, 1934.