of 61 Broadway, and to submit that their claim is not "fair," in fact, it has done harm in certain localities.

V. Conclusion

Not only a scientific but also a great moral and humanitarian issue is involved. It is to be regretted that the Rockefeller Foundation has not complied with a duty it owes to the rural children of the South, to the scientific world, to itself and to Mr. Rockefeller (Senior and Junior), frankly and publicly to modify its ex cathedra claim in harmony with facts.

Economics, education, welfare, health and even human life are involved.

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CAN A PUBLICATION BE CAMOUFLAGED?

The persistence of the faith that in some mysterious manner material may be distributed to the public without being published, by the mere device of mimeographing instead of printing, was again illustrated at the Atlantic City meeting. In at least two societies during discussions of the still vexed question of publishing abstracts, "mimeographed" as a substitute for "printed" abstracts were urged on the alleged grounds that "publication" would thus be avoided.

In his discussion "What is a Publication?" Storer points out that the method used in reproduction has no bearing on the question of publication. He cites among other examples the experience of the Biological Survey with Bird Banding Notes, a mimeographed publication which when it was initiated bore a note on the first page of each issue—"Bird Banding Notes is not a publication and is not for general distribution." In spite of this, however, the scientific value of the contained matter soon became evident and the material was cited by other investigators. I am further informed by the Biological Survey that Bird Banding Notes is now being sent regularly to Biological Abstracts at the request of the editor of that review journal.

The Plant Disease Reporter is a case in point. This mimeographed serial was established in 1917, as a means of making readily available to working pathologists incidental information thought to be of transient rather than of permanent interest and which should be placed in their hands more quickly than was possible through any available printed medium. The result was a collection of mimeographed notes, the popularity of which was immediately attested by the material presented as well as by the demands for the Bulletin, as it was then called. In 1923, to still further emphasize the informal nature of the series, the name was changed to Reporter. In spite of this, the actual

¹ Science, n. s., 75: 486-487, 1932.

scientific value of the material included has been abundantly attested by its repeated citation in regularly printed scientific literature and by numerous reviews of its contents in the *Review of Applied Mycology* everywhere recognized as the standard review journal for mycological and plant pathological literature.

It is obviously possible for a group of workers in a limited field, for example, taxonomists, to bind themselves not to recognize species published by a particular method or for that matter in a special group of languages or in a particular color of ink. But general scientific matter disseminated in any form available for more or less permanent record is certainly scientifically published, whatever the method of duplicating employed.

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THE AGE OF METEOR CRATER

IN Science, Professor Blackwelder proposes that the Coon Butte crater in Arizona is of the Post-Tahoe epoch, some forty to seventy-five thousand years old. This decision is supported primarily by the evidence of the lake bed in the crater proper. However, in connection with the lake-bed a statement is made that I feel needs some correction. On page 559, Dr. Blackwelder states concerning a layer of rhyolitic ash in the lake bed: "The bed of volcanic ash is plainly the record of an explosive eruption somewhere in the south-western arid region. No such eruption is known to have occurred since Pleistocene (late glacial) times. If the age of this shower is ever determined it may afford important evidence regarding the age of Meteor Crater." (The italics are mine). It happens that the date of the shower mentioned is probably known accurately. At a meeting of anthropologists in Santa Fé during September, 1931, the Arizona University party reported the discovery of pit houses filled with ash, not too distant from the Meteor Crater. Wood was recovered from these and has been dated by Dr. Douglass, using his tree-ring calender. It had been buried by an eruption that took place in the neighborhood of 793 A. D. If the two showers are identical, then Barringer's dating of 2,000 to 3,000 years ago is probably the most acceptable of all.

Much supporting evidence for the inter-glacial dating is drawn from the formation and degradation of the talus slopes. I feel strongly that we can not draw analogies from the formation of talus where the only agents are those normal to a moist and colder climate. There is no doubt in my mind that the talus slopes were built up by the impact and explosion and not by the usual forces that disintegrate cliff faces.

¹ Vol. 76: No. 1981, pp. 557-560, December 16, 1932.