paper, or that the Bureau of Standards should serve to the same end. Our technical institutions and colleges should also pay more attention to the manufacturing of paper and should add to their curriculum the manufacture of paper and lectures on the paper industry.

But far more important is it that publishers and libraries and learned institutions should work together in such matters to the end that all publications, books as well as periodicals, to be used and preserved by such institutions, should be printed on paper of good lasting quality. Such publications must have printed on their title-pages the words, "For Library Use." To be sure, publishers will charge more for such copies than for the ordinary ones. The libraries and learned institutions will gladly agree to this. The same would apply to certain newspapers.

I must believe that what has been pointed out above will be sufficient to invite attention to this most important question; and as the space in these columns is of unusual value its consideration will not be further touched at this time.

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THE CANONS OF COMPARATIVE ANATOMY

IN the discussion in this journal[1] of the so-called canons of comparative antaomy as illustrated in the vessels of angiosperms and *Gnetales,* Professor E. C. Jeffrey employs his canons (!) in the familiar methods of the believers in *schrecklichkeit.* As such methods in any field of activity have very little effect on the real issues, the writer declines to be drawn into tempting retaliations or into discussions of unnecessary side issues apparently intended as diversions, but proposes to end the matter, so far as he is concerned, with a simple summary of the facts and the conclusions which have been drawn from them on both sides.

1. Two of the canons (recapitulation and conservatism in certain regions) are beautifully illustrated in connection with the vessels in question. In regard to this statement Professor Jeffrey and I are in entire agreement.

[1] SCIENCE, N. S., Vol. XLVII., Nos. 1214, 1221 and 1231.

2. The porous perforation of the vessel of *Gnetum* has been evolved by the enlargement and coalescence of circular, haphazardly-arranged perforations (*Ephedra* type) which are themselves in turn derived from typical bordered pits. In regard to this statement also Professor Jeffrey and I are apparently in entire agreement; at any rate our disagreement is not based on it.

3. The similar porous perforation of the vessel of higher angiosperms has been evolved by the disappearance of the bars from the perforations of the scalariform type found in lower angiosperms. With this statement Professor Jeffrey was in entire agreement when his very recent and excellent book "The Anatomy of Woody Plants" was written. On page 379 of that work he wrote, "The vessel with the porous type of perforation is clearly derived, as has been demonstrated in an earlier chapter, from the scalariform condition." (See also pages 101 and 102.) In his latest contribution to this discussion he states, however, that in some cases it originates as described in statement (2) for *Gnetum.* Nevertheless, inasmuch as he gives no instances of this phenomenon in angiosperms, and does not even mention it in his book, we may conclude that statement (3), which is merely another way of expressing his own quoted statement, is essentially correct.

4. From (2) and (3) it follows that the porous vessels of angiosperms and *Gnetales,* though similar, have been evolved in entirely different ways and therefore have no genetic connection. They can not, therefore, be used as evidence of relationship between these two great groups of plants. From this statement Professor Jeffrey dissents, apparently believing that it is not a legitimate inference from the given premises. To the writer it appears to be the only logical inference.

W. P, THOMPSON

QUOTATIONS

THE COORDINATION OF SCIENTIFIC PUBLICATION IN GREAT BRITAIN

THE Faraday Society arranged a meeting to consider the "Coordination of Scientific Pub-