THE HOMING OF A DOG

In this month's issue of The Review of Reviews is a copy of some notes taken by Professor Herrick of Cleveland, Ohio, and published in The Scientific Monthly. This refers to the "homing" of certain cats. I have had much experience in this line myself in my earlier years and can confirm what he says. My greatest story of this instinct, however, is not with cats but with a collie dog still living and in my possession. Canon City is distant from Denver something like 160 miles by rail. The D. & R. G. road passes southeast forty miles, then turns north to Denver. This course is necessary on account of the range of mountains divided by the Arkansas River. This range consists of many lofty peaks in which Pike's Peak is included, almost directly in line between Canon City and Denver.

One of our neighbors directly across the street moved by rail to Denver, taking this dog less than a year old with him on the train. In less than a week he was back at the old premises and barking joyously as ever. We adopted him and now for six years past he has been one of the family. He has given so many evidences of intellectual power that whole pages could be written of him. Possibly the remembrance of this episode in his life is the reason he will never voluntarily ride in any kind of vehicle. With his three feet yet remaining (one lost in covote trap) he will travel miles to keep us company in an auto and when we take him in forcibly will leap out regardless of any speed we may be making.

W. D. HARRY

QUOTATIONS

CONTROLLING RESEARCH ENDOWMENTS

MEN of wealth do not always show wisdom in their endowments of science. Sometimes their ideas are fantastic. The late Mr. Carnegie, for example, early in the nineties, learned with surprise that there was still dubiety about the descent of man. He suggested buying Darwin's house at Down, putting up a sum of money and "settling the matter one way or another" in the decisive fashion of business. Later on his wealth and his knowledge, or his capacity for taking competent advice, grew, and he founded the splendid Carnegie Institution of Washington, a large part of the funds of which have since been continuously engaged on the more general problems of evolution, to the great benefit of knowledge, but without yet "settling Darwinism one way or another"!

Endowments on a princely scale are able to run on their own lines and to adapt themselves to the changing needs of science. But smaller funds are less flexible, and are often attached to a purpose so precise that their real utility may cease. Even if the original testators had ideas that were vague and liberal, the lawyers whom they employed to devise the terms of the trust, and the subsequent lawyers who have had to interpret them, have generally contrived to secure the maximum of rigidity. For such is the way of lawyers, preferring the form to the substance.

ROYAL SOCIETY TRUSTS

Our own Royal Society, to take an example of the disabilities arising from the rigidity of bequests, has over thirty separate trust funds to administer. The total income is not large, but it is relatively large as compared with the income that can be applied to the general purposes of the society. Every year the council begs possible donors not to tie up their gifts or their bequests. They state that in their experience "the usefulness of the Society for the Advancement of Natural Knowledge has been greatly hampered by the lack of funds which they could freely use according to their own judgment." All over the country, attached to scientific societies and institutions or to universities, there are many similar rigid endowments, given doubtless for a purpose that was urgent at the time, but now wasting zeal in their administration, and failing to make continuous additions to the progress of science from their inappropriateness to present needs.

There are many immediate objects which may appeal to the taste or to the imagination of the wealthy, and which could be gained within a reasonable time. It might be useful were the leading societies from time to time to draw up lists of these, with estimates of the possible period within which they might be completed and of the sums of money which seemed necessary. A simple legal formula could be devised for the administration of such a specific bequest, with some provision against capitalization and the assignment of unexpended balances to some other object after a definite period. The donor's benevolence could be recorded in perpetuity, were the memoirs describing the results associated with his name.

THE AMERICAN PLAN

But there are also donors who wish to provide capital funds, large or small, for the perpetual benefit of science or of some branch of natural knowledge. One of the members of the National Research Council of America has proposed a scheme in which he hopes to have combined permanence with flexibility. In that western home of liberty a very large interference with what in Europe we still think the inalienable rights of the individual is not only advocated, but is accepted with docility, and I gather that the intention is to compel benefactors to wisdom.

It is proposed, in brief, that the board of trustees to whom is to be committed the administration of any permanent gift for the advancement of science should be elected at stated periods by a committee of electors. Of the latter, five are to be appointed annually, two chosen by the board itself, and three by some stable institution such as, for example, the National Research Council, which is a working organization of the National Academy of Sciences. The duration of office should be for five years, and a member would not be eligible for re-election for one year. The object is that every board of trustees should be chosen by persons a

majority of whom are approved representatives of the science or sciences named, fully conversant with the situation in the age in which they are acting, free from self-interest in the election, and, by virtue of their position, charged with responsibility for rendering this type of service.

The trustees so elected and so kept in continuous touch with the best interests of science should have full power in regard to the supervision of projects and expenditure of funds. But what is the vital element in the scheme is that they would have power to adapt the provisions of their original charter to what *they* conceive to be the object of the funds, so as to meet "changing conditions and needs in the spirit of the original intent of the donor." It is a very interesting proposal, which if carried out on a large scale would probably do much for the progress of science, and certainly increase to a very marked extent the power of the National Research Council. But *Quis custodiet ipsos custodes*? Is it quite certain that even a National Research Council will prove a perpetual fount of wisdom and impartiality?— London *Times*.

SCIENTIFIC BOOKS

An Advanced Course of Instruction in Chemical Principles. By ARTHUR A. NOYES and MILES S. SHERRILL. Complete Revision. pp. XVIII + 310. The Macmillan Company, New York.

PERHAPS in no other subject is the *method* which is employed for instruction more vital than it is in Physical Chemistry; for it is in that subject that the distinction between Power and Knowledge is probably most marked.

In striking contrast to the many books on this subject which are written from the purely descriptive point of view, books which are attractive because easy to read, but which leave the reader only with a vague knowledge of what has been done, and with no acquired power to apply the principles studied to the new questions of to-day and to-morrow, this book is intended primarily to make the principles and at the same time their general and specific application so clear, that the knowledge and the power to apply and use it practically are developed simultaneously. In other words, the problem-method of instruction, first introduced in Physical Chemistry by Speyers in his "Text-book," and amplified by the Reviewer in the second edition of his "Elements" (1902), is the method recognized in this work as the only one which will "give that intensive training which is essential for pursuing more specialized courses of scientific study, or for applying chemical principles to industrial problems."

It is to be regretted that the authors have not seen fit to include any journal-references in the text, either to the things directly con-