

crease and diffusion of knowledge among men.'

The British government refused to accept this trust from the Englishman Smithson, deeming the condition too broad and too difficult to comply with. The Congress of the United States thereafter was made the same offer by Smithson on the same conditions and accepted this trust on these conditions from Smithson while he was alive; this trust we are in honor bound to meet in every particular, now that Smithson is dead.

Are we faithful to this trust when we pay the secretary of the Smithsonian Institution out of the Smithson Fund—and then compel him to administrate our own large national institutions and thereby force him to neglect the Smithsonian Institution proper? To what extent this has been done is likely soon to become known throughout the scientific world in connection with questions that have thus far been suppressed here at home, but will come out by the enforcement of a recent act of Congress.

It seems to me that it is not merely a question of 'divorcing the museum idea' from the Smithsonian Institution, but to put a stop to the robbing of the Smithson Fund and to the nullification of the Smithson will. We certainly should administer our own national museums, zoological gardens, astrophysical observatories and flying machines, all paid for from national funds, granted by Congress; we should select the best man for each one of these duties and pay him from our own United States funds for his work. To take the pay for this our work in any manner or form from the Smithson Fund is to rob the grave of Smithson. It is a national disgrace that should cease the instant it is realized to exist.

But we should not only cease to rob the grave of Smithson; we should also again make an effort to comply with his conditions and to realize, in his name, so far as it be possible, his ideal: to increase and diffuse knowledge among men throughout the world.

Let us at least try to do that as well and as faithfully as it was done under the adminis-

tration of the first secretary of the Smithsonian Institution, Joseph Henry.

GUSTAVUS D. HINRICHS.

4106 SHENANDOAH AVENUE,

ST. LOUIS, MO.,

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IS NOT THE SMITHSONIAN AN INSTITUTE OF RESEARCH?

TO THE EDITOR OF SCIENCE: In your issues of June 8 and July 27 I note communications from David Fairchild and David M. Mottier in regard to certain changes they would like to see made in the work of the Smithsonian Institution.

I wish to take exception to one or two statements made by these gentlemen, though I entirely agree with some of their suggestions.

In the first place, both articles *imply* that the Smithsonian Institution is not now a place where important research is being done. Surely if one will but glance over the last 'Annual Report of the Smithsonian Institution' and the last volume of the 'Proceedings of the National Museum,' some sixteen hundred pages altogether, he will be forced to the conclusion that research is being done at the Smithsonian Institution. Note also some of the important monographs that have appeared under the auspices of the Smithsonian, Dr. True's recent work on the whales, for example. As is pointed out by the assistant secretary, the time of the regular staff is largely taken up with administrative duties, but, in spite of this fact, a very considerable amount of research is accomplished by these men. Besides the investigations carried on by the regular staff of the institution a large amount of research is done under the auspices of the Smithsonian through grants of money, the loan of material from the museum, and in other ways.

It seems to me that the Smithsonian is already the 'Nucleus of a great national * * * institute of research.' That with sufficient funds much more might be accomplished goes without saying; certainly it would be well to have a permanent corps of investigators who should not be hampered with routine administrative duties, and also tables where college

men could come for a time to carry on their investigations, though how a professor could leave his college duties for a 'term of two years' is not evident to me.

But why give up the museum feature of the Smithsonian? Certainly the United States should not be without a national museum. And if the museum were given up, what would be done with the great collections already there, and with the magnificent building now under construction? Used simply as a research laboratory this building would accommodate all the investigators in the entire country. With such a start as has now been made it would seem a great pity to discontinue one of the most popular and instructive attractions of the national capital, and to distribute to other museums the exhibition and working collections there brought together.

In the first article noted it is stated that 'In our universities the pedagogic element is predominant to a degree quite unknown in the German universities, and the body of investigators in them in any one field is too small to create that which is the most stimulating thing in all research—an atmosphere of investigation.' It is certainly true that most of us who are in university work are heavily burdened with pedagogic duties; but President Gilman once said, 'Sterile intellects attribute their non-productiveness to overwork, when a more acute diagnosis detects a lack of will-power.' The statement in the above quotation in regard to the absence of the 'atmosphere of investigation' in American universities seems to me to be rather sweeping. Of course in a majority of our colleges the number of men in each department is so small that it is difficult to create an atmosphere of investigation, but that there is such an atmosphere in many of our best institutions is an undoubted fact.

In conclusion, I should say—let the Smithsonian *continue* to be the nucleus of a great national institute of research, and, without diminishing the importance of the museum feature, let sufficient funds be made available to carry on the additional work suggested in the two articles quoted. ALBERT M. REESE.

SYRACUSE UNIVERSITY.

SPECIAL ARTICLES.

YELLOW MICE AND GAMETIC PURITY.

THE attention of readers of SCIENCE has been directed by Professors Morgan (1905) and Wilson (1906) to the curious method of inheritance of yellow pigmentation among mice, according to observations made by Cuénot (1905). Cuénot found that yellow in mice behaves as an ordinary Mendelian character dominant over all other types of pigmentation, but peculiar in that it can never be obtained in a homozygous condition, yellow mice forming regularly two sorts of gametes, one sort being yellow, the other sort being in some cases gray, in other cases black, and in still others chocolate.

These surprising observations carry with them important theoretical conclusions. Already they have been interpreted in ways very different by Cuénot and by Morgan. A fuller knowledge of the facts may show which interpretation is correct, or whether possibly neither is adequate without some modification. It is important first fully to establish the facts. With this idea in mind (and, I confess, inclined to be sceptical because I had found yellow so different in behavior in guinea-pigs and rabbits from what Cuénot reports it to be in mice) I have recently made a reexamination of some breeding records of fancy mice, reared in 1900–1901, in connection with an investigation of sex-determining factors in mammals. The purely incidental records of color-inheritance have not previously been published, and I should hesitate to publish them now in their fragmentary condition, did they not serve to supplement and in the main to corroborate the more extensive observations of Cuénot.

My original stock of mice, obtained from a near-by breeder, consisted of the following sorts: (1) black-white spotted mice, some homozygous, some containing chocolate as a recessive character; (2) chocolate (or chocolate-white) mice, homozygous or else containing recessive total albinism; (3) yellow mice (three in number) all of a clear reddish yellow color above, but almost white below. Young were obtained from one only of the three yel-