

herent rights would entail disastrous consequences? Very possibly it would, and evils of this sort might have to be faced, but they would be in their nature temporary, and not nearly as disheartening as the lasting and deepening evils involved in the perpetuation of an administrative policy which is an affront to every professional instinct. Professor Joseph Jastrow, in a remarkably forceful and enlightened discussion of this subject in its bearings upon university administration (*SCIENCE*, April 13), puts the whole matter in a nutshell when he declares for the substitution of 'government by cooperation' for 'government by imposition.' This is surely the ideal toward which everyone having at heart the interests of education as a professional matter should strive, in fields both high and low, and we have observed numerous recent indications of a reaction in this sense from the military or corporate ideal which has hitherto had things its own way. But the enemy is still strongly intrenched, and his position will not easily be forced.—*The Dial*.

THE GEOLOGICAL SURVEY.

THE National Geological Survey has properly taken alarm at the radical cut which Mr. Tawney, the new chairman of the House committee, has made in the appropriation for its work. He proposes to reduce the annual charge from \$1,400,000 to \$1,050,000, a cut which falls with especial severity upon certain of the survey's operations. The allowance for the measurement of streams for water-power purposes and to aid in settling other questions of municipal and domestic importance, in which New England is so vitally interested, has been cut from \$200,000 to half that sum. The coal-testing plant at St. Louis, recently described in the *Transcript*, will be asked to get along on half rations. The division of mineral resources, and the Topographical Survey, have also felt the committee's pruning knife.

While it has long been evident that the Geological Survey was expanding far too rapidly, in common with various other functions of government, so radical a cut as this is neither necessary nor desirable. The sur-

vey has trained its own scientists for their various lines of work, and such a reduction as Mr. Tawney proposes would break up a corps that could not in years be reassembled. In view of the expenditures for war, like the \$100,000,000 a year in time of profound peace, for the navy, it seems little short of ridiculous to be disturbed over a great civil establishment, whose work is counting for civilization and progress in a score of directions, at an annual cost which equals that of the navy for only four days. So long as the government can spend freely for some things, it seems unreasonable to hold other agencies down to the strict rules of economy. The survey is now moving vigorously to get the House or, if not that body, certainly the Senate, to restore its appropriation, in part, at least. Every new chairman of the appropriations committee makes a similar attempt. Mr. Cannon did, when he went into that service, and so did Mr. Hemenway, and now comes Mr. Tawney.

The national irrigation enterprise which is conducted by the Geological Survey, though not carried in its appropriations, is now at full tide. More ditch digging is probably in progress under its direction than at Panama, for the records show that the reclamation service is employing four thousand persons directly, and that the contractors working under it employ seven thousand more. Irrigation expenses have now reached one million dollars a month, paid for by the sales of public land, and at this rate expenditure will go on, it is safe to predict, for some years. These enterprises bring differing problems, and although no one of them is so difficult as that at Panama, they present in the aggregate questions to be solved, engineering, mechanical and financial, probably not less serious than at the Isthmus.—*The Boston Transcript*.

ASTRONOMICAL NOTES.

SUGGESTIONS FOR A THEORY OF THE MILKY WAY AND THE CLOUDS OF MAGELLAN.

MR. ARTHUR R. HINKS, of Cambridge, England, has published an interesting pamphlet on 'Suggestion for a Theory of the Milky