

painstaking, and make a simple stand of small size and compact model with first-class lenses, they would furnish something which could be recommended to students and others by conscientious advisers.

Turning now to the consideration of continental microscopes, so universally used in Europe, and now happily gaining supremacy in this country, we see at once that they conform to the practical requirements which are disdained in the making of most American microscopes.

They are built with a firm base. The stage is easily reached by the fingers when the hand is resting upon the table. It carries no superfluous appurtenances, but is large and flat. The eye-piece is of such a height, that when the instrument is vertical it is easy to look into it. Concerning the lenses, it must be said that most of the European manufacturers are very conscientious in regard to those which they furnish. There are, of course, some makers who put upon the market objectives of inferior quality, and which are sold as such, and therefore at a correspondingly low price. This is of course legitimate, as there is a demand for cheap microscopes.

The price of these desirable microscopes is very much less than that of undesirable American ones. According to our system of protection, the physicians, scientific men, and students are taxed enormously if they buy a foreign instrument. Put into plain English, this means that we are heavily fined if we secure what we require in the way of microscopes, while a small number of manufacturers, whose money-making is of very little significance to the public, receive a bonus for furnishing an inferior article at a high price. Thus what is really important is sacrificed for what is unimportant. Many valuable members of the nation are sacrificed by being obliged to pay for the advantage of a small number of men who have never shown themselves willing to supply to those by whose sacrifices they benefit, the kind of instrument wanted.

Can any thing be more unjust? and are not we, who are engaged in university careers, in the practice of medicine, or any other useful occupation requiring the employment of microscopes, justified in complaining of the condition of affairs, which is little short of a national calamity? Is it unreasonable to ask the manufacturers of microscopes in this country to furnish us instruments of the kind we really need, as some sort of acknowledgment of the money they extract from us whether we will or not?

In expressing myself so decisively and emphatically upon the subject of American microscopes, I have not considered it necessary to give a detailed discussion of the relative merits and demerits of the different makes, because what I have expressed is the opinion, in these matters, of all the competent judges with whom I have talked on the subject.

I know positively that many of the best scientific men of America are ready to join me in saying, as I said at the beginning, that there is no American microscope which we should like to buy at any price for our own use.

CHARLES SEDGWICK MINOT.

Boston, Nov. 24.

#### The 'Act of God' and 'Fuerza Mayor.'

MR. MORGAN'S article in *Science* of Nov. 18, 'The "Act of God" and the Railway-Company,' is highly interesting, and suggests an illustration drawn from comparative national jurisprudence. The English common-law doctrine of the 'Act of God' appears very scientifically elaborated in the laws of Mexico under the title of 'fuerza mayor.' Our neighboring republic is greatly advanced in the science of law. While certain disturbing elements there interfere somewhat with the practical application of statutes at times, according to our views at least, nowhere on the continent has the science of law been more carefully studied, and the results of that study more accurately defined and set forth in both constitutional and statutory form. Religious faith, too, in Mexico is to-day as living and active a force in common personal life with the great body of the people as it was in Europe in the middle ages; and this fact again, as Mr. Morgan's article suggests, illustrates how, while the limitations of the Old-World doctrine have been gradually narrowing in the United States, it still holds its ground in Mexico with proportions which practically make it the leading condition of all contracts, expressed and implied.

As an instance of how this provision enters into express contracts,

let us take the great railway-concessions to the leading American companies. In these concessions 'fuerza mayor' generally appears in three distinct places. The obligations of the company to build within certain fixed periods are suspended in case of 'fuerza mayor.' The concessions are forfeited by the companies carrying any foreign armed force or goods contraband of war, unless they can show that this was done because they were unable to resist 'fuerza mayor.' Certain bounties granted to the railways cease during the time that the operation of the lines is suspended, even if the suspension should take place by reason of 'fuerza mayor.'

In the smaller transactions of daily life this doctrine continually appears as an unwritten law, which suspends all other laws, or contracts, or obligations. Superior force, which often in Mexico means what would simply be called disaster in the United States, is to the Mexican mind a good defence against almost any obligation. For instance: should one lease a boat for a month at a fixed sum, and unusual storms prevent using the boat for half the month, that would be ample reason why the lessee should tender only half the rent to the lessor, and he feel constrained to accept the offer.

'Fuerza mayor' is translated as 'superior force,' or 'uncontrollable circumstances.' These circumstances are nowhere, to my knowledge, defined, but the facts of what are uncontrollable circumstances are to be decided in each case. The coercion of an armed force is 'fuerza mayor.' The violence of storms is 'fuerza mayor.' The flooding of a river is 'fuerza mayor.' And, as before remarked, very generally what we are apt to consider as disaster, in Mexico becomes 'fuerza mayor,' and operates to relieve a contract of its obligations. To the American mind a contract made must be carried out, and disaster, if there is any, falls on the man who has loosely guarded his contract. In the confluence of the American and Mexican civilizations now taking place, it becomes an interesting question how this wide difference between the usage and thinking of the two countries will adjust itself.

W. W. NEVIN.

New York, Nov. 21.

#### The American Physique.

IN order to find out how closely the figures of makers of knit goods would correspond to those of the clothiers, I sent a letter to one of the largest manufacturers. I enclose his reply, together with the figures. You will observe that the figures on men's ware correspond very closely with those of the clothiers, making allowance for the tighter fit of the undergarments.

EDWARD ATKINSON.

EDWARD ATKINSON, ESQ.

Dear Sir, — Your favor of the 11th inst. was duly received, but the article referred to was not enclosed. It is impossible to give a perfect assortment of sizes of underwear for men and women, as the assortment varies in the weight of goods, and the section of country they are for. I enclose, however, a copy of an average order for 1,040 dozen of men's shirts and drawers, and one for 507 dozen ladies' vests and drawers, which will show very closely the sizes that we sell, and the proportion of shirts and drawers:—

	26	28	30	32	34	36	38	40	42	44	46	48	50	52
Men's shirts.....					88	124	128	84	52	32	16	10	4	1
Men's drawers....		40	88	104	92	68	44	28	20	12	4	2		

  

	26	28	30	32	34	36	38	40	42	44	46	48	50	52
Ladies' vests .....	45	113	127½	82½	34½	15	7½	1½						
Ladies' Drawers.....	4½	15	22	18	12	6	3							

#### Queries.

18. METEOR-FALL. — A few days ago there appeared in the newspapers a circumstantial account of the fall of a two-ton meteorite in front of a bank in the town of Amsterdam, N.Y. I have seen nothing but this first announcement about it, and fear the whole story may be a canard, yet would like to know that it was a genuine happening. Can you report the matter in *Science*, and doubtless oblige many others besides?

C. H. AMES.

Boston, Nov. 27.