

M. CH. LALLEMAND ON DAYLIGHT  
SAVING IN FRANCE.

M. CH. LALLEMAND, who was appointed *Commissaire du Gouvernement* to inquire into the effect of a modification of time reckoning, when the question was raised in an acute form nine years ago, gave to the Paris Academy of Sciences on April 10 a reasoned statement of the whole problem. The question he raises is: Would, even in the exceptional circumstances of the time in which we live, the advantages of this change be of such a nature as to counterbalance the profound disturbance which could not fail to be introduced into the economic life of the people? The conclusion at which he arrives is that the reform in question offers illusory or insignificant advantages in return for certain and definite inconveniences.

This decision is the result of a careful examination of the changes that have been made in the methods of time reckoning in the past, and a review of the exact conditions that obtain in the present. In his historical survey he demonstrates the jealousy with which the French adhered to the observance of the Paris meridian as the origin of time, and the dislike exhibited to any proposal that interfered with the mode of reckoning. In 1816, when the change was made from apparent to mean time, so keen was the antipathy displayed by the populace that an outbreak was feared, and yet in that case the maximum alteration was at most a quarter of an hour. But he is more concerned to show that the position of the sun in the sky affords the proper determination of time, and that an arbitrary displacement of noon, combined with differences of longitude, operates very unequally in districts east and west of Paris. If legal authority sanctioned the further displacement of an hour, as proposed, though Nice, for example, would not be injured, Brest time would, in extreme conditions, be as much as  $1\frac{1}{2}$  hours away from true time, an amount that M. Lallemand insists is intolerable.

The last change introduced into French time computations was the adoption of the Greenwich meridian as a common origin for time reckoning, and some irritation is naturally felt that after this concession was made, the English should propose to abandon their system of time reckoning for at least half a year in order to adopt what is practically German time. Such instability of practice is inconvenient, but a more direct source of trouble would arise from disturbing the published ephemerides which give phenomena expressed in Greenwich time. This duality of timekeeping during six months of the year would be, in the case of tides especially, a source of great annoyance and perpetual confusion.

M. Lallemand devotes a section to the consideration of the advantages claimed by the advocates for the reform. He examines the methods of street illumination, and claims that the people living in the country districts, some four-fifths of the whole, would receive a quite insignificant benefit. In many manufactories as at present conducted, work goes on night and day, and no economy could be effected in this direction. In Paris the illumination is reduced to a minimum on account of the Zeppelin visits. The custom adopted in colleges and schools would likewise prevent these establishments profiting by the proposal. Cafés, restaurants, theatres, concert-rooms, might now close an hour sooner, if economy were so ardently desired, and the desired result could be as easily secured by a simple order of police as by a general interference with timekeeping. In any case, it is questionable whether those interested in the management of such places of amusement would not apply for an extension of time and re-establish the *status quo ante*.

Hygiene is as little likely to benefit as economy.

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It is an illusion to suppose that an arbitrary alteration of the hands of the clock dial will promote early rising, or retiring, on the part of those who have surrendered themselves to other habits; it would be as reasonable to attempt to fight alcoholism by diminishing the legal capacity of the litre, in the hope of reducing in the same proportion the quantity of liquid absorbed. It is not true to suppose that the nominal hour and the true hour have no influence in practice, or that the habits of the people are decided solely by clocks, and have no relation to the sun. The change in the breakfast hour in Paris refutes such a notion.

To prove that the abrupt advance of time in the spring, and its equally sudden restoration in autumn, would be accepted by the public with indifference, it is usual to point to the ease with which travellers accommodate themselves to the change in time when passing the boundary of a longitude zone. The comparison is not convincing. In the particular case cited the error of legal noon changes its sign but keeps nearly the same absolute value, which is the only thing that matters.

FLORAS AND GEOGRAPHICAL  
DISTRIBUTION OF PLANTS.

OUR knowledge of the flora of Siam, and especially of the neighbourhood of Chiengmai, has grown rapidly during the last few years owing to the extensive collections made by Dr. Kerr, and more recently to the activity of the forest officers. In the *Kew Bulletin*, 1911, an important paper entitled "Contribution to the Flora of Siam" was published, the introductory matter being supplied by Dr. Kerr and the determinations and descriptions by Mr. W. G. Craib. Since then seven papers dealing with additional new species, described by Mr. Craib, have been published in the *Kew Bulletin* from time to time. In the last number of this journal for 1915 (No. 10), the eighth "additamentum," containing descriptions of twenty-seven new species, has appeared, belonging to various natural orders. For most of these Mr. Craib is responsible, but for three new *Ampelidæ* and a *Dalbergia* he is associated with M. Gagnepain.

The flora of the high mountains of Malaya is of particular interest in connection with the geographical distribution of plants, since here are to be found the meeting ground of Australian and Himalayan plants. Mr. H. N. Ridley in 1912 made an expedition to Gunong Tahan in northern Pahang, the results of which have just been published in the *Journal of the Federated Malay States Museums* (vol. vi., part iii.), and his account, taken in conjunction with what we know of the flora of Mt. Ophir and Kedah Peak, makes possible a general survey of the relations of the high mountain flora of the Straits Settlements with the flora of Kinabalu, in Borneo, and Australia, on one hand, and with that of the northern regions on the other. The Himalayan element found in the Telom Valley, Perak, seems to be remarkably absent from Tahan, but in the xerophytic regions of the sea coasts and the higher mountains Australian plants are found. On Kinabalu, however, the Australian element is more pronounced than on Tahan, and in New Guinea it appears yet larger. It would seem that at one period an extensive xerophytic area stretched from the Australian region bearing its characteristic flora, but that owing to climatic changes it was swamped by a typical Malay rain-forest flora, and only now persists on sandy seashores and dry mountain tops. Five Kinabalu plants found on Gunong Tahan are not known from elsewhere in the Malay Peninsula, and since they have neither drupaceous nor wind-borne seeds a former land connection with Kinabalu is assumed.