As these ladders are approximately only about one three thousandth of an inch in length, it is wellnigh impossible to count the ladders for even a two years' growth. It would seem, however, that the theory here set forth, that each ladder represents a day's growth of the fibre, is likely to be correct.

There is, however, one other matter to be considered which might invalidate the whole argument: Is the coat of the platypus composed of life-length fibres or only of year's-growth fibres? Does the platypus retain its under coat for its life or does it 'moult' or cast its coat yearly? Curious to relate, certain animals, such as the musk ox, cast their under coat yearly, but the Merino sheep, which according to the late Prof. Cossar Ewart has thrown off the outer hair coat of the wild sheep and retained only the under coat, does not cast this under coat: Merino sheep have been sheared carrying a five-years' growth of wool.

I would therefore ask the help of other workers in the elucidation of the two problems basic to the theory here advanced:

(1) Do the animals carrying a 'laddered' under coat cast this coat yearly, or do they retain the under coat for life, the life-histories of the animals being shown on the fibres just as the age and history of a tree are revealed by the rings from bark to centre?

(2) Is the 'ladder' truly representative of a day's growth of the fibre in the case of animals other than the platypus which show this ladder structure of the fibre?

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The Social Organism

IN the last few years science has thrown her searchlight upon social physics, making amazing discoveries. She shows that there are laws underlying social physics as immutable as those she has discovered in material physics. This fact compels the assumption that the evolution of social bodies follows the pattern of all organisms in an increasing specialization of parts with a reciprocal unification of structure. This means also that a society in its evolution becomes a social organism. The facts disclosed by science lead to no other interpretation.

In our study of natural history which now includes the history of societies, we find that all beings—mechanical, vegetal and animal—may be classed in a serial order ranging from the most simple to the most complex, and from a motor-car to a social organism. In the inevitability of this order man will find he has a sure guide to control his interference with and to direct his assistance to Nature's process of social evolution. Hence the call everywhere heard for the help of science in the work of social organization.

So long as we ranged social phenomena as a class apart from physical phenomena, science could not pass the frontiers of the latter. She had to concentrate upon improvements in mechanics and chemistry.

One cannot organize a heap of sand. Before a body can be organized there must be some binding element tending to integrate its diverse parts into a whole. This necessity becomes more evident as organisms rise in the order of their complexity. In the long past this binding element was supplied by the general concept of a superhuman power. To-day this concept is no longer general. Societies have been trying to pull themselves together either by a common defence of material possessions or by a common defence of personal rights.

But science alone can supply the missing link between the individual and society. This link is in the new conception of the social body as an organism in process of development.

The supernatural concept of the past had reference only to the individual, and in its decay it has given rise to an unrestrained individualism which has engendered disorganization and disruption instead of organization and integration.

A modern society is composed of individuals who are forced to live in association and to maintain their life by co-operation. This is the new phase and one pointing directly to the organization of the maintaining activities in accord with the law of organic life.

In the absence of scientific direction, we have been intensifying the specialization of the individual without any compensating balance in the form of a common conception such as will induce the highly specialized individuals to direct their specialized competence in building up a welfare beyond that of the individual, but one within which the welfare of each would be embodied.

In this lack of any integrating influence in the presence of elements which are in themselves disintegrating, lies the cause of the restiveness and the antagonisms of the present day in almost every European nation.

The universal instinct of man is restless in its search for law and order, and if it find no real law and order outside his own consciousness, he will create a fictitious law and order—Bolshevism, Socialism, and what not.

Here social science, which is the capital science, together with all the sciences preliminary to this, from astronomy to physiology, may keep societies out of the bog into which they are drifting. Never before has science had such an opportunity of educating and directing the civilities which constitute the civilization of mankind. By insistence upon the recognition of each body-politic as a social organism true to type, and by the habit of a conception which will enlarge the aim of science, industry and arts, this enlargement of the social functions will cause a new social structure to arise for their ample accommodation; which sociological structure will follow the pattern of physiological structures.

By the process of evolution millions of unicellular organisms have been brought into organic integration to form a multicellular physiological structure—vegetal, animal or human. By the same process Nature is incorporating millions of individuals in a multipersonal organism. This is the positive fact upon which social science is built.

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