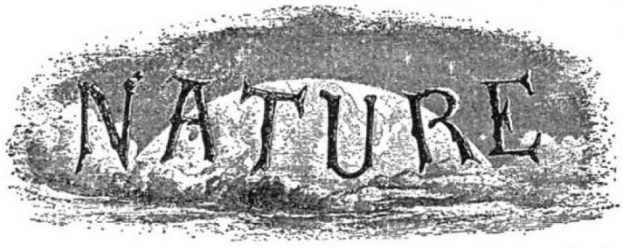
chance of filling in gaps in present understanding of what happens in the high atmosphere of the Sun. A century ago, when *Nature* was constantly at loggerheads with the British government for what then seemed to be parsimony in supporting observations of eclipses, an opportunity such as that on Saturday to observe such a favourable eclipse would have been invaluable. It is only fair to say that times have changed a little. For one thing, the high atmosphere of the Sun is now much better understood and there is every chance that in time the data which are accumulating about the solar wind will support accurate and complete inferences about the Sun's outer atmosphere.

But how is it possible to give this chance a numerical value, in dollars or pounds? Unhappily, the yardsticks which are available for comparison are probably misleading. The fact that the first Apollo applications satellite, with its steerable solar telescope, will be equipped for direct observation of the corona is hardly any guide—that is a much more expensive operation than any eclipse observer would expect to participate in. In the long run, in any case, it may well be that eclipses are to be valued most as occasions when people make collective and simultaneous observations in a way that evokes some of the old spirit of the international geophysical year (which is why nobody should weep too much if it is cloudy in Mexico on Saturday). But this is why it is a pity that this week's occasion is not more fully equipped. The real worry will be to make sure that the next eclipse, in 1972, is properly observed in the parts of Africa from which it will be visible.

100 Years Ago



M. Radau falls into the schoolboy blunder of making the *ratio between the friction and pressure constant throughout the motion*, confounding the actual friction with its limiting maximum value! It is, indeed, surprising that such a perversion of the facts of the case should have found insertion in a serious journal, such as that published by the Ecole Normale Supérieure, and I might fairly have expected from M. Radau the courtesy habitual with his adopted countrymen, of applying to me for information on anything in my paper which might have appeared to him obscure or erroneous, before rushing into print with such a *mare's nest*.

In a future number of your esteemed journal (as time at present fails me) I propose to show how, by the simplest contrivance in the world, a downright material top of ellipsoidal form may be actually made to roll, with its centre fixed, on a fixed plane and so exhibit to the eye the surprising spectacle of a motion precisely identical *in time*, as well as in its successive displacements of *position*, with that of a body, turning round a fixed centre, but otherwise absolutely unconstrained.

From a letter from the mathematician J. J. Sylvester whose conclusions about the motions of a free rotating body had been criticized by M. Radau. From Nature, **1**, 482, *March* 10, 1870.

OLD WORLD

Battle for Atlantic Salmon

THE antipathy of Denmark, Sweden and West Germany to a ban on salmon fishing in international waters of the North Atlantic has now prompted Mr Harold Wilson to send a personal message to their heads of government—an appeal the Danish Premier has already rejected. Last summer the delegates of these countries were the only people to oppose the call for a ban on salmon fishing made at meetings of the North East and North West Atlantic Fisheries Commissions, which have no powers to enforce their recommendations. The present disagreement has been caused by the rapidly growing exploitation of salmon on their feeding grounds on the high seas, which several countries (especially Britain and Canada) believe is frustrating their efforts to breed and conserve salmon for coastal and freshwater fishing.

There is a strong case for countries in whose rivers the salmon breed to have a prior claim on the harvest. In Britain, for example, more than £1 million a year is spent on salmon protection and conservation, and on top of this sum there is a large "invisible" expenditure by industry in terms of effluent treatment and by power stations in keeping young migrating fish out of their water intakes. Fishing is also strictly controlled by by-laws and close seasons, and the number of licences available for fishing in estuaries can be restricted as a conservation measure within river authority areas, while only about a dozen licences have been issued for coastal fishing elsewhere in England and Wales. Coastal fishing off Scotland is prohibited. In Canada and the state of Maine, according to Sir Hugh Mackenzie, director of the Atlantic Salmon Research Trust, the annual cost of protecting salmon runs to about $5 million.

On the other hand, Denmark, where there are only a very few rivers in which salmon are found, gets the lion's share of the high seas catch. The chief fishing area is off the west coast of Greenland, where drift netting began in 1965. By 1967 seven or eight boats were fishing there, in 1968 eighteen, and in 1969 at least thirty-seven. Eighteen of the fishing vessels came from Denmark, six from the Danish-owned Faroes, eleven from Norway and two from Sweden. Table 1 (top row) shows the growth in catches since 1965. But claims that the coastal fisheries of Greenland or Britain are suffering as a result are not directly supported by the available figures. In Greenland a drop in the 1968 catch was reversed in 1969 (Table 1, second row); for England, Wales and Scotland there is so far no clear effect on the total catches that can be

Table 1. SALMON CATCHES, GREENLAND AND GREAT BRITAIN (1965–69), IN METRIC TONS

	1965	1966	1967	1968	1969
Greenland (international waters)	36	119	318	548	1,300*
Greenland (coastal fishery)	825	1,251	1,283	579	900*
Great Britain (coastal and freshwater)	1,922	2,011	2,553	1,845*	2,315*

* Provisional figure.
All figures from the Ministry of Agriculture, Fisheries and Food.