The weakest part of the Scranton Commission's report is that which deals with the university. It is all very well to ask that university faculties should acknowledge the need for qualitative changes to accommodate the much larger numbers of students now clamouring for university places—the essence of the difficulty with which faculties are confronted is that of reconciling flexibility and firmness. In the past few years, a great many universities have leant over backwards to give students what they ask for—meaningless courses on subjects such as Black studies, for example—and have in the process lost their self-respect. There is a point at which a university faculty should insist on its competence to teach only what it knows, and thus deny the Spockian view that a university should by definition be able to provide all young people with whatever they may want. The essence of the present conflict between the universities and their customers—the students—is that the interests of both sides are in genuine conflict. Whatever the effects of the Scranton Commission's report—and they are almost certain to be beneficial—there is no avoiding the tendency towards universities in which faculties and student bodies are increasingly isolated from each other. Whether in these circumstances universities will be as competent as in recent decades to provide students with a vocational training of great value to industry, commerce or government is less certain. In short, the changes in the function of the American university which are now in prospect may go much deeper than the Scranton Commission imagines.

100 Years Ago

SCIENTIFIC ADMINISTRATION

NO reflecting Englishman can contemplate the great events of the present time without desiring to extract from them such warnings and instruction as may be serviceable to his country in case she should be drawn into war. Accordingly the press teems with discussions on every branch of the military art. We leave these to others. In what respects the constitution, the discipline, the training, and the arming of one army are superior to those of the other, it is scarcely the function of this journal to point out. Taking the broad fact that the Prussian army has, up to the present point, proved itself superior on the whole to that of France, and indeed to any army that has ever existed—a fact that no unprejudiced person will deny—let us ascertain, if we can, whether there may not be recognised some one broad cause to account for so broad a fact.

From *Nature*, 2, 449, October 6, 1870.

OLD WORLD

SOVIET UNION

Arrests and Reinstatements

by our Soviet Correspondent

THE wave of protests by scientists and intellectuals against the limitation of academic freedom by the Soviet state continues. The latest to be arrested is the mathematical physicist, R. I. Pimenov, who, according to underground sources, was recently arrested in Leningrad and is awaiting prosecution under the criminal code of the Russian SFSR on a charge of disseminating "falsehoods derogatory to the Soviet State and social system".

Pimenov, who is 40 years of age, is well-known for his monograph on *Spaces of the Kinematic Type*, which has appeared in print both in the Soviet Union and in the USA. The facts behind the charges against him are not easy to ascertain, but certain rumours have linked his case with that of geneticist Zhores Medvedev, forcibly committed to a Kaluga mental hospital earlier this year for circulating privately produced (*samizdat*) essays criticizing state interference in science and the censorship of private mail.

Nikolai V. Timofeev-Resovskii.

Happier news, however, has been received of another member of what may be termed the "Medvedev circle". In August 1969, Medvedev's friend and colleague, Nikolai V. Timofeev-Resovskii, at the Obninsk Institute of Radiology was forced into premature retirement on a minimal pension. Timofeev-Resovskii has always been a somewhat "doubtful" character to the authorities, in spite of an excellent record in the Soviet cause in the revolution and civil war, since, during the '20's and '30's he was working in Germany and was trapped there by the war. In spite of the fact that he played an active part in anti-Nazi resistance work, and his own son fell a victim to the SS, Timofeev-Resovskii was accused of being a collaborator and a German spy and was imprisoned for several years. Following his release, he had worked for some time as head of the section of general genetics and radiobiology in Obninsk. Unfortunately, in 1968, certain well-wishers, without his knowledge, proposed his election to the Academy of

Sciences. This drew considerable publicity and not only was his election quashed, but a campaign against him was started at the Party level. He was accused of being an "émigré" and a "Morganist", resulting in his premature retirement on a near starvation-rate pension.

Happily, Timofeev-Resovskii, winner of three major international prizes for genetics (The Darwin Plaque, (GDR), the Mendel Medal (Czechoslovakia) and the Kimber Prize (USA)), seems to have received a certain amount of rehabilitation in recent months. The current issue of *Priroda* (No. 8, 1970) publishing an article of his, "The Biosphere and Man", which is an expansion of a lecture delivered in February 1970, refers to him as now working at the Institute of Medico-biological Problems of the Ministry of Health of the USSR. If this news is correct, it can only be a favourable sign, similar in significance to Medvedev's own release from the mental hospital, after the wave of protests on his behalf by other campaigners for intellectual freedom.

ASTRONOMY

Collaboration in South Africa

A REMARK in the annual report of the Science Research Council that discussions between the SRC and the South African Council for Scientific and Industrial Research are making good progress seems to have been something of an understatement. The SRC announced last week that agreement has been reached "in principle" to merge the facilities at the Royal Observatory at the Cape and at the Republic Observatory in Johannesburg into a single station situated near Sutherland, some 250 miles north-west of Cape Town.

Although some facilities will be maintained at the Cape Observatory, the new station, which will be called the South African Astronomical Observatory, will be the chief observatory in South Africa. In the short term, the SRC and the CSIR will have little to gain from the venture, but in the long term it offers considerable scope for expansion—the two separate observatories, situated in the centres of large cities, are unsuitable for development.

The new observatory is expected to come into operation early in 1972, when it is hoped that three telescopes from the Cape Observatory and two from the Republic Observatory will have been moved to the site. It will function as an institute of the CSIR, but the SRC will retain some say in its policies through an advisory committee, consisting of representatives of the SRC and the CSIR. Sir Richard Wooley, the Astronomer Royal, and director of the Royal Observatory at Herstmonceux, Sussex, will retire at the end of 1971 to become the first director of the new observatory. The SRC at present spends about £125,000 a year on the Cape Observatory but expenditure on the new observatory could be as much as £200,000 a year.

Another statement in the SRC's annual report, that approval has been given to "investigations preliminary to consideration of a proposal to plan an accurately figured dish capable of operating in the millimetre band", has been couched in vague terms for good reason, it seems. Sir Brian Flowers, chairman of the SRC, pointed out last week that millimetre wavelength astronomy is one area of research which must regrettably be passed over because of lack of funds. The

difficulty is that such a dish must be accurate to within about one-sixteenth of the wavelength under investigation and it therefore seems that the SRC has already made up its mind that construction of a fifty-foot dish to that sort of accuracy would be too expensive at present.

New Centre for NERC

MARINE pollution is to be the primary interest of a new institute which has been established by the Natural Environment Research Council (NERC). The Institute for Marine Environmental Research has been set up not only as a centre for new research, but also to bring together various projects already in progress in universities and other organizations, under the auspices of NERC. The new institute will eventually be housed at Plymouth, in a complex of research groups which is planned to include extensions to the existing Laboratory of the Marine Biological Association of the United Kingdom. The director of the institute will be Mr R. S. Glover, who will retain the directorship of the Oceanographic Laboratory of the Scottish Marine Biological Association in Edinburgh, which has been incorporated into the new institute.

The prime objective of the institute's research programme will be to provide a deeper understanding of the biological basis of the productivity of the oceans and the way in which they are influenced by natural changes and by human activity, which of course includes pollution. This will be done chiefly by monitoring long term changes in marine communities in relation to their physical environment. These studies are intended to complement those already undertaken by other organizations.

Within the new institute it is planned to extend the plankton surveys which were started in Hull in 1930 by Sir Alister Hardy, and which are now carried out from the Oceanographic Laboratory in Edinburgh. They are to be extended, and linked with environmental surveys developed in cooperation with universities and other organizations, to concentrate on inshore areas and estuaries which are susceptible to pollution. While the new buildings are being planned, the expenditure on monitoring at the Edinburgh laboratory will be increased from £150,000 to £250,000 a year.

PHYSICS IN FRANCE

Policy for Solids

A DEMAND that the French Science Research Council and physics departments throughout France should remedy the inadequacy of crystal growing facilities and of new materials has come from a French Government committee investigating the state of research on the physics of solids and liquids (*Prospective: Physique des Milieux Condensés, Le Progrès Scientifique*, No. 139;