immediate supervisor was prepared to deny this verbally, but not to commit himself in writing). On refusing to leave without his wife, Viktor Brailovskii had his permission to emigrate withdrawn in 1977.

In 1978, after a search of their apartment, his mathematical papers were confiscated and he was warned to stop lecturing on mathematics. In April 1980, the fourth in a series of conferences was to take place, basically an extension of the regular seminars to which foreign colleagues and sympathizers were invited. Before the 1980 conference Dr Brailovskii was arrested, questioned, and threatened with imprisonment if the meeting went ahead. Nevertheless it took place on schedule.

On 13 November 1980 Dr Brailovskii was arrested, and for several Sundays the police prevented anyone from going to his apartment. Dr Irina Brailovskaya, however, soon had the seminars going again, at first on Saturday evenings, and then, when the pressures lessened, at the original time on Sunday mornings. Dr Brailovskii, meanwhile, was held in Butyrki prison for more than 6 months (the official time for pre-trial detention is not more than three months, unless a special extension is sought).

Optical astronomy

Dutch sign on

Research councils in the Netherlands and the United Kingdom will sign an agreement today (18 June) which gives Netherlands astronomers 20 per cent of Britain's observing time at the Roque de los Muchachos Observatory (formerly called the Northern Hemisphere Observatory) in the Canary Islands.

In exchange for time on Britain's four planned telescopes — the 4.2-m William Herschel, 2.5-m Isaac Newton, a 1-m photometric telescope, and a 15-m millimetre-wave dish — the Dutch will provide 20 per cent of British costs and manpower in equipping and running the observatory.

The UK Science Research Council has estimated that the telescopes would cost £25 million in October 1979 prices, and that the running costs of the site will be of the order of £1 million a year.

The Netherlands has been hesitating over its contribution because of the sums involved, and also because it represents a certain shift of resources in favour of optical astronomy. The Dutch natural science research council (SWO) has previously done much of its optical astronomy through its membership of the European Southern Observatory, which has a fixed subscription; and Dutch radio-astronomers have voiced fears that the additional international commitment to the Roque will cut into their own budgets.

However, Dutch astronomers now agree that this level of commitment to Northern Hemisphere optical astronomy is necessary. The world-famous Westerbork radio telescope is, after all, in the Northern Hemisphere, and more direct links with optical observations would be useful.

The observatory they thus become part of was set up by international agreement between Spain, the United Kingdom, Sweden, and Denmark, and though the Dutch enter by "the back door" — the new agreement being between research councils and not nations — such deals were allowed for in the original treaty. Robert Walgate

Trademarks and patents

More authorities

Rrussels

Members of the European Federation of Pharmaceutical Industries' Associations have expressed anger at the European Commission's proposals to create a Community trademark office. The drug industry, which accounts for 65 per cent of all trademarks registered, feels threatened by what it sees as an attempt to ride roughshod over its interests.

Last November the Commission brought out a directive aimed at harmonizing the member states' trademark laws, with proposals for the creation of a Community trademark and an EEC trademark office.

Trademarks are one way of ensuring protection against imitators of new medicines and guaranteeing that drugs are properly used. The pharmaceutical industry's federation, meeting in Brussels in May, concluded that placing the registration of trademarks in the hands of the Commission could lead only to confusion, as national authorities will operate concurrently with the Commission. The federation would prefer to wait until national rules are more in line with each other before setting up a European trademark office.

There is much confusion in Europe not only over trademarks but over patents and the protection of intellectual property in general. This is an economic as well as a legal problem, for representatives of industry continually stress that inadequate protection of new products puts the profitability of new research at risk.

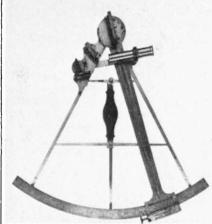
Although the European Convention on patents was signed eight years ago by ten European countries, three (Ireland, Denmark and Greece) have yet to ratify it. Italy has been particularly heavily criticized. Although it has ratified the convention, a new bill on drug patenting is being debated in the Italian parliament which appears to conflict with the convention. It is claimed that the Italian Senate has amended the bill to give protection to Italian firms manufacturing drugs which elsewhere would be protected by patent law. And in Yugoslavia manufacturers are said to be exporting low price drugs using patents provided by European countries solely for use in the Jasper Becker domestic market.

Cook's aid surfaces

A 15-inch radius brass sextant which is thought to have been taken on the last of Captain James Cook's historic voyages of exploration (1776–80), was sold at Sotheby's on 11 June for £11,000; it was made by Jesse Ramsden around 1775.

Ramsden was born in Halifax, Yorkshire, in 1735. His mathematical studies were interrupted by his father apprenticing him to a cloth-worker in Halifax; he then worked until about 1758 in a cloth-warehouse in London. It was here that he became apprenticed to a relatively unknown instrument maker named Barton (or Burton) in Denmark Court, Strand.

In 1763 Ramsden set up business on his own account in Haymarket and in 1775 he moved to Piccadilly, London, where he remained until his death in 1800. From the outset of his business life, his skill as an engraver and divider attracted the attention of leading London makers such as Nairne, Sisson, Adams and Dollond.



His design and construction of one machine revolutionized the dividing of the scales of sextants and other instruments. The Board of Longitude (set up by the Admiralty in 1714) awarded Ramsden £615 on the understanding that he would undertake to divide octant and sextant scales for other makers.

There is little doubt that it was directly due to the inventive genius and practical skills of Ramsden that the sextant was improved to the point that an accuracy of 10 or 20 seconds rather than 1 minute became the order of the day. In addition, the finely engraved scales made possible by the use of the dividing machine permitted sextants to be made smaller than previously without loss of accuracy.

Ramsden's improvements to the sextant eased life for the sailor, for latitude could now be determined with an unprecedented degree of accuracy. Even longitude, which had seemed to present insurmountable problems, was in the process of being solved, the solution being the provision of a suitable timekeeper, an accurate sextant and a nautical almanac.

Arthur Frank