which had developed, in the main, on the American continent, though the roots might be Asiatic; he thus emphasized here again the importance, in his view, of cultural evolution in America. He believed that there were cases of similarities between peoples, due not to borrowing but to psychological factors working parallel to one another. He would, however, have nothing to do with necessarian theories. Totemism, for example, seemed to him to be a term covering a wide range of associated ideas and customs; but neither are the widespread similarities proof of a unitary origin, nor is totemism a necessary expression of thought of a particular stage in human evolution. After suggesting that the Northern Kwakiutl of the Northern Pacific were in a stage of transition from mother-kin to father-kin, he later went over to the opinion that from a father-kin system they were influenced towards a mother-kin scheme and division into totemic clans by borrowing from more northerly neighbours. Sir James Frazer held that the facts agree better with Boas's earlier view.

Deeply aware of the interdependence of all aspects of human life and work, Boas felt that as a teacher he could not easily neglect any. We thus have his comments and contributions in several fields. He thought of primitive art as arising from technical execution and also from the stylized expression of emotions and thought. Stylization seemed to him to give a measure in this field of work, provided it is understood in its broader sense of controlled form. He disagreed with the theory that geometric ornament develops through degeneration of perspective, or symbolic designs because of slurring and inaccuracy; and he emphasized the borrowings of forms and the changes in their interpretation as they pass from one people to another, or from one generation to another. Among one and the same people there may be two or more distinct styles, especially if these are associated with different industries carried on by distinct sections of the group. The desire for artistic expression, in his view, is universal.

In the field of physical anthropology Boas concerned himself to show the rapid mutability of head form, and he published elaborate statistics concerning descendants, of even the first generation, of immigrants from Europe to the United States of America. Some anthropometric workers accepted his conclusions, but some found difficulties in his analysis of the measurements he gathered; and it may be said that mutability of a rapid type is by no means a general feature, if it ever occurs, which is doubtful.

Boas's broad knowledge of material culture, linguistics, social organization, religious ideas and physical characteristics of human groups gave strength and cogency to his fiercely valuable attack on Nazi racism, and on all attempts to trim and distort scientific truth to suit dogmatic schemes in politics or in any other field of expression. He is one of those who have enriched the knowledge and understanding of mankind in more ways than can be specified by giving a list of special discoveries or theories or publications.

H. J. FLEURE.

WE regret to announce the following deaths:

Dr. George Washington Carver, director of the Research and Experimental Station and consulting chemist at Tuskegee Institute, Alabama, the distinguished Negro botanist, aged eighty.

Prof. R. C. Collingwood, F.B.A., late Waynflete professor of metaphysical philosophy in the University of Oxford, on January 9, aged fifty-three.

Dr. C. Tate Regan, F.R.S., lately director of the British Museum (Natural History), on January 13, aged sixty-four.

Dr. Nikola Tesla, the well-known electrical engineer and pioneer of radio telegraphy, on January 7, aged eighty-five.

Prof. Arthur Willey, F.R.S., emeritus professor of zoology in McGill University, on December 26, aged seventy-six.

NEWS and VIEWS

An American Steam-Boat Pioneer

On January 21 occurs the tercentenary of the birth of John Fitch, the American pioneer of the steam-boat, who while other inventors were struggling with costly and inconclusive experiments built several working steam-boats, formed the first steamboat company in the world and for a period carried passengers on the Delaware according to a time-table. Fitch was born at East Windsor, Conn., and after working on his father's farm, pursued various callings, including those of a brassfounder and a silversmith. He suffered many misfortunes, made an unhappy marriage, and during the War of Independence was taken prisoner. In 1780 he became a surveyor in Kentucky and later on took to map-making. On a journey in 1785 he conceived the idea of propelling vehicles and boats by mechanical means. Quickly visualizing the value of his ideas, he made models and drawings, secured favourable opinions from public men and during the years 1786-90 made three or four boats which ran with varying success on the River Delaware. In 1791 a French patent was secured and two years later Fitch visited France to further the exploitation of his invention in Europe. The Terror, however, was then at its height and he soon returned home, having exhausted his means. From that time onwards he strove unsuccessfully against an unkind fate, and died at Bardstown, Kentucky, in 1798, at the age of fifty-three. His merits have not gone unnoticed in the United States, and in 1926 Congress erected a memorial to him where he died.

Pamphlets in War-time

As in the War of 1914–18, so in this one, pamphlets are much in evidence. There is a saying of John Selden, who flourished in the seventeenth century, that "more solid things do not show the complexion of the times so well as ballads and libels". By "libels", however, Selden meant what we mean by pamphlets, for, as Archbishop Trench remarked, the extent of meaning which a word covers is often gradually narrowed. Any little book (libellus) was a "libel" once; now, only such as is scurrilous or injurious. The truth of Selden's saying is seen in the fact that pamphlets were plentifully produced until

far into the nineteenth century, when popular magazines tended to replace them. Now they become plentiful again at times of great public excitement. The Oxford pamphlets of 1914–18 are still fresh in the memories of people who have reached or passed middle age. Pamphlets are with us again. They cover many subjects—scientific, geographical, historical, biographical, and all that relates to the Fighting Forces. For the most part they are authoritatively written, and "show the complexion of the times"

very effectively.

Recent additions to the Oxford pamphlets (Oxford University Press, 3d. net) include Lieut.-Col. Casson's "Greece", written by one who is both a scholar and a soldier, and describing the character and traditions of the Greek people. Sir John Pratt, writing from an intimate knowledge of the Far East, describes in "Great Britain and China" the chief episodes in our relations with China since 1715, when the East-India Company set up its factory in Canton; and Admiral Sir Herbert Richmond, distinguished alike as naval officer and writer, in his "War at Sea To-day" makes clear to the layman the new difficulties of naval warfare, and the means adopted to meet them.

The latest addition to Federal Tracts, published by Macmillan and Co., Ltd. (6d. net), for Federal Union Research Institute, is Prof. George Catlin's valuable pamphlet on "Anglo-American Union as a Nucleus of World Federation"—a title which explains itself. The author's distinguished record as a student of politics, and as an exponent of this particular subject, marks him out as a high authority. World federation is for him the ultimate aim, but Anglo-American Union is the first step. Cultural autonomy is the due of all nations, even the smallest, but national sovereignty is not. Lord Balfour's reference to "an English-speaking method of looking at the great affairs of mankind" is recalled and enforced—that sense of a common culture which needs to be made more articulate. Prof. Catlin regretfully points out that the whole issue has received far less attention and publicity in Britain than in the United States and the Dominions.

"The Body as a Guide to Politics", by Dr. W. B. Cannon, formerly professor of physiology at Harvard, afterwards of the British Military Service, and later of the U.S.A. Medical Corps, is more directly scientific in tone. His general thesis, which may sound fanciful at first hearing, is that the external and internal relations and activities of the body are so marvellously organized by Nature that they may throw light on the present defects of organization by man. When danger threatens the body, stabilizing agencies act on the instant to guarantee security, but when danger threatens a nation disruptive factors have full sway. The pamphlet is an elaboration of the epilogue to Dr. Cannon's popular work "The Wisdom of the Body", published in 1932. It is included in the series "The Thinker's Forum", published by the Rationalist Press Association. In the same series appears Muriel Jaeger's "Wars of Ideas", expounding the claim that Nazi-ism is a new religion, with Hitler as its Messiah.

Geographical Names

The vexed problem of geographical place names is raised again in an article in the Geographical Journal for October in which the Permanent Committee on Geographical Names of the Royal Geographical Society, Kensington Gore, S.W.7, enumerates certain principles which are offered for criticism. The whole memorandum is too long for extensive quotation but

some of the main principles may be noted. Generally speaking, names should be those used by the responsible government or official survey of the country concerned, in the case of countries that use a Roman alphabet. In names of features or places in lands not using a Roman alphabet, transliteration, with certain qualifications, is recommended. But exceptions to these general rules are allowed. In popular, text and small-scale maps, English names of conventional usage are allowed; in learned works and large-scale maps conventional English names are allowed for marine features outside territorial limits and features of international interest, with the recommendation that the foreign official name, if it differs markedly from the English, should be given in brackets. Other exceptions are in favour of English or international postal names of important places that differ markedly from official names, and, in historical context, the use, either of the name or narrow transliteration of the name that prevailed at the time under consideration, or the name conventionally known to English scholars. It is emphasized that these principles do not necessarily represent the considered views of the committee but are put forward as a basis for dis-

Russian Scientific and Technical Periodicals in Great Britain

On the recommendation of the Anglo-Soviet Scientific Collaboration Committee, the British Council requested the Association of Special Libraries and Information Bureaux to undertake a survey of the war holdings of Russian scientific and technical periodicals available in Great Britain. The survey. covering the years 1939-42 inclusive, has just been completed, and summaries of the results may be obtained from A.S.L.I.B., 31 Museum Street, London. W.C.1 ("Wartime Guides to British Sources of Specialised Information, No. 4", 1s. 6d. to members of A.S.L.I.B., and 2s. 6d. to non-members, postage inclusive). More than two hundred specialized libraries participated in the survey, which covers three hundred and thirty-four periodicals. From the summarized results it is possible to tell at a glance whether complete series of each of the periodicals for the last four years may be consulted in the Science Library or Patent Office, whether complete series have been located in other libraries, or whether the series located are incomplete. For further detailed information concerning the location of incomplete sets and odd numbers of periodicals, application should be made to A.S.L.I.B., where an index showing the particular issues received, their location. and the conditions of their accessibility is maintained. It is apparent from the survey that very few of the 1942 issues have so far been located, but attention is directed to the considerable time-lag in transit.

Potato Tips as Seed

The importance of the potato, not only as human and animal food but also as a raw material for the manufacture of starch, alcohol and synthetic rubber, has greatly increased in the U.S.S.R. since the War. At the beginning of the War a big increase in the potato crop was ordered by the Government, but to achieve the goal set, a large addition to the amount of seed potatoes available was necessary. Lyssenko claims that the problem can be, and to some extent already has been, solved by utilizing as seed small pieces of tuber weighing about half an ounce and containing one of the upper eyes. The rest of the