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ADDRESS OF THE PRESIDENT OF THE INTERNATIONAL GEOGRAPHICAL CONGRESS[1]

By Dr. ISAIAH BOWMAN

AMERICAN GEOGRAPHICAL SOCIETY OF NEW YORK

Mr. President of the Republic, Mr. Minister of Culture and Public Instruction, Officers of Embassy, Ladies and Gentlemen:

OUR first duty is to those members of the congress whose decease we record with profound regret. The roll includes our able and warm-hearted president at the Cambridge Congress of 1928, General Vacchelli, a vice-president of the union, whose loss is deeply felt by all, but especially by his close associates in the executive committee of the union, and Miss Marion Newbigin, devoted and able editor of *The Scottish Geographical Magazine.*

The congress will also wish to pay its tribute to the late William Morris Davis, in earlier years an active participant and leader in international geographical excursions and congresses whose professional interests and friendships recognized no national bounds.

In opening the sessions of the fourteenth International Geographical Congress, I wish first of all to thank our hosts for the invitation they so hospitably extended six years ago at Cambridge and which was renewed at the Congress of Paris in 1931. I should like to comment also upon the excellence of the arrangements that have been provided and that reflect both devotion and intelligent care on the part of Professor Romer, Professor Pawlowski and their associates upon the Polish National Committee. May we through them thank the Government of Poland for the interest which has been shown and for the gener-

[1] Opening address before the International Geographical Congress, Warsaw, 1934.

ous support given to the plans of the congress and for the presence here to-day of the head of the republic, President Moscicki? Under such favorable conditions we are assured at the start of a useful interchange of ideas and a substantial strengthening of the bonds of friendship.

It is fitting that I should here record with deep gratitude my dependence, and indeed the dependence of all of us in the Union, upon the unceasing devotion of the secretary-general, Professor de Martonne. During the past three years, his task has been both continuous and arduous, dealing with members distributed over the planet, with active commissions that have continuing programs, and with a president on the opposite side of the Atlantic. His patience and resourcefulness have been equal to every task. You will wish, I am sure, to join in thanking him for his generous contributions to our professional welfare.

Since the last congress, three additional political units have adhered to the International Geographical Union: Germany, Canada and Danzig. It is with great pleasure that we welcome their representatives to-day and look forward to their participation in both management and program.

With all our diversity of interest and endeavor in the wide field of geography, we have a common dependence upon the map. It is the symbol of our profession. At one time or another, every geographer seeks to make a contribution to the map of the world —to survey still unmeasured portions of land and sea, to compile surveys into useful base maps, to display and interpret distributional phenomena, to deepen the understanding of the spatial elements of our physical world and its life relationships by invoking the highest standards of graphic art. At the preceding congress it was recommended that the cartographical institutes of the world should send representative material to an exhibition, now admirably installed, and which you will wish to visit repeatedly during the ensuing week. It is the most representative map collection that has ever been displayed in the history of geographical congresses, 40 organizations from 23 countries participating in its development. It is an especial pleasure to say this in Poland and in the presence of Professor Romer, whose contributions to cartography have played so important a part in the development of geographical science. We shall all hope that a catalogue and description of the maps in this inspiring collection will be one of the future publications of the union, so that those members not present and all geographers everywhere will be able to share with us the benefits we here derive from the maps on display.

The various items of the cartographic exhibit reveal the many-sided character of geography and so too do the topics before the congress under the six main headings of the program and the eight commission assignments upon which work has progressed during the past three years. Notably important were the papers in physical geography that have always had a prominent place in the programs of the past. This year we find both climate and physiography represented as well as cartography, human geography, historical geography, regional geography and educational geography. Excursions to well-selected places have afforded and will afford convenient access to some of the most interesting geographical features of Poland.

With these opportunities before us, may I make a few observations about certain aspects of geography that may be thought appropriate in this international gathering. Like every other science, geography attempts to widen the boundaries of knowledge. At the same time it seeks to perfect techniques of research in order that its analyses may give us a deeper and, at the same time, a more vivid understanding of the complexities of life upon a diversified earth. We attempt through these twin processes of discovery and method "to get discipline as well as information out of it," as the late William Morris Davis once phrased it. With fuller equipment for deepening the understanding we are in the position of the astronomer who by perfecting and enlarging his telescope deepens his vision of the universe.

Set in an inescapable, if somewhat modifiable environment, we seek to gain insight into the problems of other peoples, who, like ourselves, are trying to avoid the necessity of living in the hardest way or in the hardest places. Adaptation is one of the key principles of geography as well as biology. No part of the earth has had all its human possibilities revealed, its ultimate contribution to human welfare made fully known. The search for new resources and new adaptations is still in progress. We can not suppose that in 1934 we have reached the end of the road and have appraised all earth's possibilities. Land and sea must be constantly resurveyed from new points of view. Nor is it the earth alone that needs scientific exploration and systematic study. Economic and social mankind is on the march, evolving, adapting, inquiring about its own possibilities as well as those of the earth to which it is tied. Man has sensed his powers, not fully developed them. As destiny-guider he is still an amateur.

On a grand scale our geographical congresses enable us to widen the range of our experience, exchange knowledge for mutual benefit, quicken choice and action with respect to our neighbor, and, through association of effort, advance our study of realities so that eventually our minds may sweep through the whole interrelated earth with all its regional diversi-

ties and attempt to understand the bases of life of all who share the planet with us. Until expert knowledge of existing realities is available we shall not find those sought-for understandings of the world's peoples that are required to ease existing tensions. A rational change in relationships will not come by capricious action or through ignorance or provincialism. If we really understand how and why humanity is compartmented in its several regions, we shall find adjustments less difficult to make, even though we are at times oppressed by the complexities. The earth is a vast reservoir out of which man dips power. There is unequal access to that reservoir: the earth's benefits are unevenly distributed and, in addition, as Professor Penck has phrased it, "There is no land of unlimited resources." This is due in part to what we call the geographical layout. In part also it is due to the voltage of man's own mind, ever changing the significance of a given environment, searching out new advantages, developing new technical skills, seeking balance or proportion in community, regional and national life, extending the boundaries of knowledge, and adapting the earth and humanity to satisfy material and esthetic needs. To take an example from a single field: not always are desirable mineral deposits accessible—witness the geographical disposition of the coal beds of China; nor are they always required at the moment—witness the vast iron-ore deposits of Brazil. We have begun, but in no sense finished, our regional inventories of fact about the resources of the earth, the uses which we may make of them, the mutual adaptations. Nor has any one yet been able to draw a clear line of distinction between matters under domestic control and those which can never be used rationally and fairly except through international consultation and agreement.

In Professor Romer's notable address at the opening session of the International Geographical Congress at Paris in 1931 is this striking challenge: "Would that this notable assemblage were evidence that geography is officially recognized in public life and national questions as an important subject." In the three years that have elapsed since this statement was made the world has passed through a period of strain that has suffered directly or indirectly every community wherever situated. In the face of local as well as world-wide tension, intelligent men in every country have given much more thought than formerly to some of the fundamental bases of life. Whether or not we deplore the policy of national isolation and self-containment, each country has felt it necessary to examine in detail its resources of every kind. In this examination geography has played a notable part. Were I to name those who have contributed to the discussion of material resources, and how to improve our use of them, I should be required to mention most of the professional geographers of the world.

That we have met in such number, under such favorable auspices, for the discussion of a wide range of both theoretical and practical questions is evidence of a great community of interest with respect to the earth and man's relation to it. Forty-three nations are represented in this assemblage. There is promise of good attendance upon all the sectional meetings and helpful discussion. I venture to say that through the interchange of thought that takes place here we shall be better able to return to our several countries and do our part in community life as well as in research and education by more intelligent assisting the never-ending process of adaptation of means to end in our use of earth's gifts.

SHELTERBELTS—FUTILE DREAM OR WORKABLE PLAN

By RAPHAEL ZON
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THE President's vision of a belt of forest trees, stretching through the Great Plains from North Dakota to Texas, caught the popular imagination as no other forest enterprise in recent years. The idea, suggested at the time when the Middle West had been suffering for several years from severe droughts and dust storms, was dramatized by popular imagination and newspaper publicity into a grandiose plan of changing the climate of the entire plains region, and eliminating droughts and dust storms through the planting of trees.

The plan, as popularly visualized, called for regimenting the trees into uninterrupted and undeviating parallel forest strips, 8 to 10 rods wide, rigidly spaced one mile apart, irrespective of topography, soil or direction of prevailing winds. This naturally brought forth some skepticism and occasionally outright condemnation of the plan. As a matter of fact, the Shelterbelt project, stripped of the exaggerations of its friends and the misinterpretations of its opponents, resolves itself simply into concentrated forest planting within a comparatively narrow belt some 100 miles wide and 1,200 miles long, in that portion of the Great Plains where climatic and soil conditions make