United States Geological Survey. Ages ago this part of the Atlantic Coastal Plain was from time to time covered by the sea, into which streams swept vast quantities of mud, sand and gravel and boulders which formed thick deposits that covered large areas. When the region finally emerged from the sea the Potomac River cut its valley in these deposits, which were carried about here and there also by smaller streams. The larger boulders are derived from the granite on which the gravel lies, but some of the smaller pebbles come from parts of the Potomac basin beyond the Blue Ridge and others from veins of quantz in the granites of the Piedmont Plateau.

Over the layer of plant débris and muck in this old swamp fine clay and pebbles were laid down by streams of water during the glacial epoch, when the northern part of North America, as far south as northern Pennsylvania, was covered with immense sheets of thick ice, showing that the trees lived in the latter part of the Great Ice Age, which is variously estimated to have ended from 20,000 to 30,000 years ago.

## OPPOSITION TO EVOLUTION IN MINNESOTA

IT was reported in SCIENCE last week that at a conference in St. Paul, Minn., of pastors representing Baptist, Congregational, Presbyterian and Lutheran churches, it was decided to issue a call for a state-wide meeting of Protestant ministers to oppose the teaching of evolution in the public schools of Minnesota.

At this meeting, which was held on October 26, the following resolutions were passed:

*Preamble*—As American citizens we believe in the complete separation of church and state, and are opposed to religious teaching in public schools—higher or lower.

As those who wish to teach Christianity must support their private schools, we believe it but just that those who wish to teach anti-Christian theories should be forbidden the use of tax supported schools for propagating their opinions.

Whereas, The evolutionary hypothesis has come to be accepted by many American teachers, and is increasingly taught in the public schools of Minnesota, including high schools, our state normals and state university, and Whereas, This hypothesis, after sixty-three years of study, remains wholly unproven, and has increasingly shown itself to be a foe to the Christian faith, denying as it does the veracity of the Scriptures,

Therefore be it resolved, That we, citizens of Minnesota, representing thousands of our fellow citizens, hereby utter our protest against this propaganda of infidelity, palmed off in the name of science, and we call upon the trustees of state institutions to demand of teachers a cessation of such teaching and the removal from our schools of such text-books as favorably present the same.

We do this in the interest of true science vs. science falsely so-called; and in the interest of fair dealing.

We hold that the first amendment to the constitution of the United States, "Congress shall make no law respecting an establishment of religion," was never intended to be interpreted that the state should become sponsor for irreligion; and that it is manifestly unfair to impose taxes upon Christian taxpayers to inculcate teaching inimical to the Bible and destructive of civilization itself.

We have waited patiently for this hypothesis to either prove a truth or to pass from public instruction. Having now no prospect of either, we demand that the state shall prove its impartiality toward its citizens by dispensing with a subject that is utterly divisive; and is, in the judgment of thousands of its taxpayers, utterly false.

And we declare that if the school authorities prove derelict in the enforcement of the law relating to the teaching of religion or of theories subversive of the Christian faith, we will appeal to the legislature for the enactment of such laws as shall eliminate from our tax-supported school system this antiscientific and antiscriptural theory of the origin of man and the universe.

## THE ADMINISTRATION OF THE UNITED STATES GEOLOGIC SURVEY

ON November 15, David White completes ten years service as chief geologist. This contribution to the administration of the survey has been at the expense of his own scientific work, even though he has thereby increased the scientific value of the work of his associates. It seems fair that his oft-repeated request for permission to return to his own geological studies should now be granted, not only to gratify the natural desire of an investigator