ment of a National Eye Institute. This letter constitutes my firm endorsement for establishment such an Institute. I realize that certain highly qualified persons in Washington have expressed some objection concerning the establishment of such an institution because of the increased administrative costs and possible overlapping functions with other Institutes. I am aware that the National Institute of Neurological Diseases and Blindness now has within its province some of the missions which would be included in the mission of the National Eye Institute which has been proposed.

I am not derogatory of the accomplishments of the National Institute for Neurological Diseases and Diseases and Blindness. However, the rather extensive mission of that Institute has made it impossible for the staff to exert efforts directly toward attacking the many aspects of blindness, which I am sure you will recognize as being one of the most undesirable afflictions that can befall a man. Meanwhile, it is well known that blindness is on the increase in the United States. This is pointed out in a recent article that appeared on page 1 of the *National Observer* for Monday, November 20, 1967. In that article, it is indicated that although the population of the United States increased 36% from 1940 to 1960, blindness increased more than 67%.

In my work as a scientist, I am well aware that many of the efforts now undertaken for developing phosthetic devices for the blind do not take advantage of the capabilities of modern science and technology. Many of the devices that have been developed use obsolete components and technologies. This seems doubly tragic when blindness is such a serious affliction, and there are ways in which problems may be successfully attacked—problems which seemed insuperable only a few years ago.

I am enclosing an article that appeared a short time ago in *Blindness 1966* and which will apprise you on my views on the matter. I certainly trust that your deliberations will result in favorable consideration for the establishment of a National Eye Institute and a concerted effort to make use of the storehouse of capabilities and technologies which are most promising.

Very truly yours,

GEORGE G. MALLINSON,
Dean, School of Graduate Studies.

[From "Blindness 1966," AAWB Annual]

PROSTHESIS FOR THE BLIND—ONE BILLION DOLLARS IN TEN YEARS?

(By Dr. George G. Mallinson, Dean, School of Graduate Studies, Western Michigan University, Kalamazoo, Mich.)

October 4, 1957, the date on which the Russians launched Sputnik I, may be viewed in many different perspectives. It was a day of humiliation, real or imaginary, when "those people" suddenly orbited the first satellite, thus placing the United States in an allegedly unenviable position of being second. It was a day on which much witch-hunting began. Instead of crediting the Russians with much scientific and technological skill, we sought to find the perpetrators of the indigence and delay that resulted in our failure to orbit some hardware earlier. American education, declining juvenile morality, and the degradation of Appalachia were among the phenomena castigated. It may be viewed, also, as the real beginning of the Space Age when man first began to send and control vehicles outside the earth's atmosphere. Many dour scientists, including colleagues of the writer, proclaimed that the United States would need at least 25 years of intensive research before a satellite equivalent to Sputnik I could be orbited. Without question, the day set off the "Space Race" with one major objective the landing of a manned vehicle on the moon presumably with the subsequent return of the occupants. This noble venture is referred to as Project Apollo.

There is little doubt that a manned vehicle on the moon will elicit vast amounts of scientific information, much of great importance, and much also of questionable importance. The exact cost of Project Apollo will probably never be known, although it is estimated that direct and indirect expenditures aimed at landing and hopefully returning the vehicle and its occupants will be at least 50 billion dollars.

NOTE.—The nature of this publication has suggested that technical and scientific details be kept to a minimum. The references cited will provide many pertinent details, assuming the reader is desirous of exploring them further. Italic numerals in parentheses refer to bibliography at end of article.