Medical work of engineers cited
By John Montanari
Allen Latham Jr., first vice-president at A. D. Little Co., spoke Monday in the Miller Room on the role of engineers in medicine. Mr. Latham is a mechanical engineer, M.I.T. '28, who is currently working on a method to preserve whole blood for transfusions.

Mr. Latham felt that medicine is not only an exciting and rapidly advancing field and a rewarding one, but also an area of rapidly rising costs. It is the engineer, says Mr. Latham, who throughout history has had the role of lowering costs by improving production efficiency. In medicine there are already many engineers at work—M.I.T.'s Dr. Samuel Collins has recently developed a "heart-lung" machine of superior quality—and a number of recent advancements are offering a special medical engineering course.

Mr. Latham discussed at length his special interest, the long-term preservation of whole blood. By conventional storage methods, blood is only usable for about five weeks. But by dehydrating the blood and adding glycerine, it is possible to then freeze the blood and keep it in a refrigerator. By this means it is possible to keep the blood for as long as two years, but the system is too expensive for widespread use.

One method being studied is to use a "heart-lung" machine, in which the blood is pumped directly from the patient into a reservoir of blood, where it is kept in an oxygenated state. In this way it is possible to keep the blood for as long as five weeks, and it is not necessary to freeze the blood.

Mr. Latham spoke about the role of engineers in medicine and the need for engineers to take an active part in medical research. He said that engineers have a unique ability to see the big picture and to think in terms of systems, and that this ability can be very valuable in medical research.

The medical field is very complex, and there are many different factors that must be considered in any medical research. Engineers can help to simplify these problems by looking at them from a systems standpoint. They can help to design experiments and to develop new techniques for testing and analyzing medical data.

Mr. Latham also spoke about the importance of communication between engineers and doctors. He said that doctors are often too busy to think about the practical aspects of their work, and that engineers can help to bridge the gap between the two fields.

Mr. Latham concluded his talk by saying that he believed that the future of medical research was very promising, and that engineers would play an important role in making this research a success.