One characteristic property of the space age is that scientific exploration has become closely linked with undertakings requiring tremendous expenditures. An expedition to the moon will indeed be very costly and at the same time is likely to yield great scientific benefits in finding out the nature of our satellite as well as obtaining information, with the help of a lunar observatory, about electromagnetic waves emitted in all wavelengths by astronomical objects. Plowshare offers a possibility of decreasing the cost of such an expedition by providing the scientific explorers with one of the most important substances: water. It is likely that bound water exists in the rocks of the moon just as it is found in many of the minerals of the earth. Actually our oceans have been formed from the water vapor contained in volcanic eruptions. Ultimately one may say that the oceans have been boiled out of the rocks of our planet. Water must have been released when the craters of the moon were formed. But this did not lead to any permanent water cover since the lower gravitation of the moon is not sufficient to prevent the escape of the water vapor from our satellite.

It may be possible to duplicate our Gnome experiment on the moon. Just as the Gnome explosion has produced a great amount of water, so an underground explosion on the moon might result in the release of a hundred tons of this commodity. If we wanted to transport this amount of water in our rockets the price we would have to pay for it would be in the neighborhood of the value of 100 tons of gold.

The easiest step in the execution of any such project is to give it a name. In this case it would seem reasonable to call the procedure by which a violent blow will produce water from the lunar desert, "Project Moses."

The purpose of this lecture was to give you an impression of the main characteristic feature of Plowshare: its exceedingly wide applicability