exact length of the successive days (as in the American southwest in prehistoric times), it would not be easy to determine the exact number of days in any one round of the seasons, but by averaging the seasons for a number of years a fairly exact determination would easily be made. (It is thought that this was done in prehistoric Egypt by averaging the number of days between the annual floodings of the Nile).

Since a complete round of the seasons takes 365 1/4 days, and the moon goes through 12 cycles in 354 days, it would be quite natural to think of 12 months as approximating a year, especially in the hot desert of Arabia where the moon would be a prominent factor in life and there might be little change of seasons. Under such conditions the fact that 12 cycles of the moon is actually 11 days short of a year might easily fail to be realized. A straight lunar calendar, counting 12 lunar months as a year, became established among the followers of Mohammed and is still used by the Muslims. Every year their calendar drops back $111 / 4$ days. Muslims are forbidden to eat or drink on any day in the month of Ramadan. Each year Ramadan begins 11 days earlier than the year before. It may occur one year in the middle of summer, a few years later in the middle of winter.

It is understandable that under desert conditions a lunar year might seem satisfactory, but under the conditions of the land of Israel such a calendar would never work. For a year or two it might not be noticed that every month was beginning 11 days earlier than in the preceding year, but soon the scheduled dates of such events as the Day of First Fruits and the Feast of Harvest would begin to arrive before the crops were ready. We may be sure than when it seemed likely that this would happen the priests would announce the insertion of an extra month, either in the spring or in the fall. Soon these intercalations were being made at least once every three years. In Babylonia and Greece similar determinations were made by the rulers. Thus the length of the year would oscillate between 354 and 384 days. Eventually a definite system of introducing extra months at

