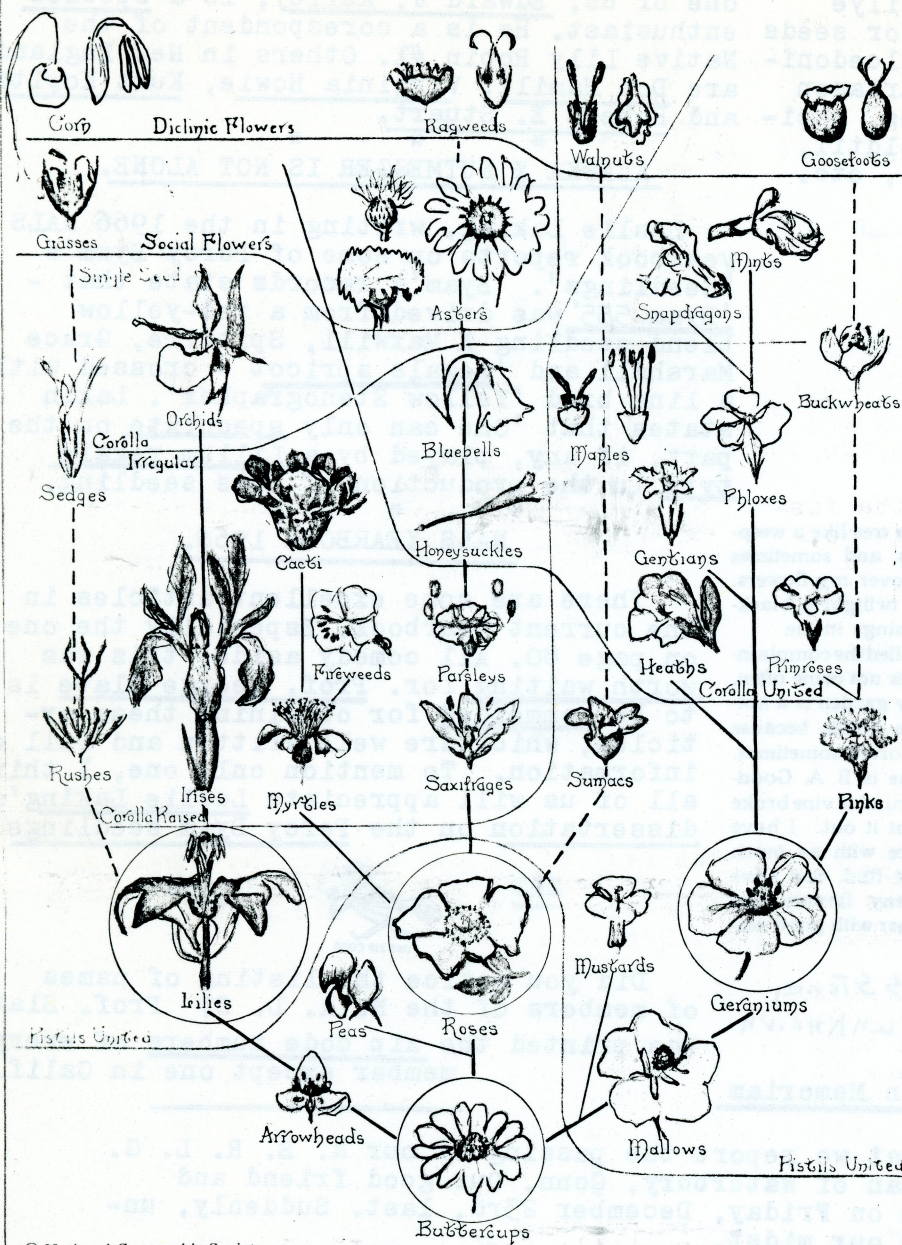


# LILIES DEVELOPED FROM THE LOWLY BUTTERCUP. 6.

WILD FLOWERS OF THE WEST

EXCERPTS FROM THE NAT'L GEOGRAPHIC MAGAZINE OF MAY 1927.

Articles by  
Frederic E. Clements and  
William Joseph Showalter  
Sketches and color by  
Edith S. Clements.



The story of the descent of flowers, as shown in Plate I and as related in the preceding article, represents the conclusions of many botanists, - and constitutes a working hypothesis - upon which further researches are being made.

The authors submit that the lowly buttercup is the Mother Eve of the magnificently diverse race of flowers.

Countless generations marked the climb of buttercups to lilyhood.

One wonders how many years this process took. A thousand million years? Within the 'Lily Family', Nariposas and Trillium have 3 petals and 3 sepals. - The Lillium have the same.

But the true lilies developed their beauty in answer to an evident need for greater publicity for their wares among the insects hosts. This they secured by coloring the calyx like the corolla, so that the lily appears to have six petals instead of three.

Once the lilies gained this development they were so well satisfied with their flowers that they become conservatives, little given to radical changes. - They made many departures in color, shape, an size, but in the fundamental organization of the blossom they have adhered so closely to their traditions that whether they be tulips, mariposa or trillium etc. they still wear the common coat of arms of the family.

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May, 1927 THE FAMILY TREE OF THE FLOWERS

All of our flowers, according to many botanists, are descended from the buttercup. Those which have stayed strictly at home are buttercups still, but those which sought to adjust themselves to new environments became arrowheads and lilies, roses and peas, mustards and mallows, as the family tree suggests. The peas and mustards have not adventured further in family ramifications, but the geraniums, roses, and lilies have vastly enriched the variety and beauty of the floral world by their contributions. The solid lines indicating descent show those flowers on the family tree which are fertilized by insect-borne pollen, and the broken lines those which are fertilized by wind-borne pollen.

The plant breeder's art is but a revelation of the plasticity of the flower and affords us some idea of the forms the flowers of the ages ahead will take.

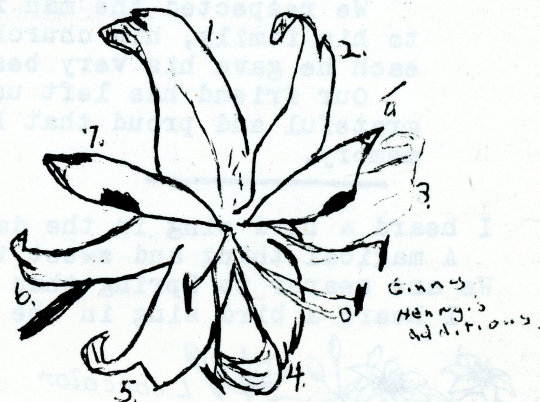
In double flowers the stamens and pistils are gradually converted into petals.

In Stone and Payne's gardens we have a few lilies which show double tendencies. One is double except for the pistil. Others are as the illustration.

1 to 6 - the tepals,

7 & 8 - the stamens showing as a black mark on the 2 extra petals.

Will manual hybridizing reduce ages to years?



NORMAL LILY - SIX STAMENS  
THIS LILY - FOUR STAMENS