



## Early Hay Fever

AY FEVER originally got its name in England, because its severest outbreaks in that country came at the time of the hay harvest, and people got the idea that the hay was somehow responsible for their itchy noses and smarting, tearful eyes. In a way it was, but not exactly in the way people thought.

Hay is usually cut during or just after blossoming of the grass, because it is then at its highest point of development. It has reached its maximum growth, as well as its highest content of starches, sugars and proteins. Cut and cured at that stage it offers best nutrition for livestock.

However, by the same token, blossoming grass is of course shedding its pollen freely. All grasses are wind-pollinated, and wind-borne pollens of course are the great cause of hay fever. So because coincidence is misaken for cause, hay gets the blame for what pollen does.

However, in this country at least, even grass pollens are responsible for only a very small fraction of hay fever cases. The big tide of sneezes, as everyone knows, begins in high summer, when the ragweeds come into bloom. Ninetenths or more of all hay fever cases in the United States are traceable to ragweed pollen.

But even the early hay fever incidence is due only in minor degree to grass pollens. A much more important early hay-fever weed is the narrow-leaved plantain. Ranking close to this common lawn pest are various wind-pollinated tree flowers (and most tree pollen is wind-borne), notably oak, walnut, hickory and ash. Pine and other conifers produce immense quantities of pollen, but it seems to trouble fewer noses than

does the pollen of decidous trees. Early hay fever gives more trouble to allergists than late cases of the malady. If a patient comes in with typical symptoms during July or August, the odds are more than ten to one that ragweed pollen is to blame. But in May or June it may be any one of a score of plant species, so that the victim's arm has to be scored with many pollen-test scratches.

Ironically, people tend to blame bright flowers that they notice rather than the inconspicuous apetalous, usually green pollen-shedders that are really responsible. Just as goldenrod gets cursed for the crimes of the ragweeds, roses often "take the rap" for early hay fever, under the misnomer of "rose fever."

Science News Letter, June 6, 1942



## Confidence Rides With The Dawn Patrol

HEN the bombers of the Atlantic Patrol thunder into the dawn, their pilots look ahead with confidence—confidence born of faith in their machines and the fuel that drives their motors. American fuels, like American planes, are built to bring back safely those who fly.

Somewhere, in an American refinery, one of America's great army of behind-the-scenes workers, with a Bausch & Lomb Refractometer, is doing his part in making American oils and gasolines so efficient and safely dependable. Modern refractometric methods of control speed refining operations and maintain a greater uniformity and higher quality than ever achieved before.

Here, again, optical science — with Bausch & Lomb instruments — is at work helping to strengthen America's front lines. Today, American manufacturers—like the nation's armed forces — turn to precision optical methods for critical analysis, precise measurement, quality control. Bausch & Lomb Contour Projectors, Metallographic Equipment and microscopes for inspection and control take their place alongside range finders, gun sights and binoculars in contributing to the vital needs of national war effort.

## BAUSCH & LOMB OPTICAL COMPANY • ESTABLISHED 1853

AN AMERICAN SCIENTIFIC INSTITUTION PRODUCING OPTICAL GLASS AND INSTRUMENTS FOR MILITARY USE, EDUCATION, RESEARCH, INDUSTRY AND EYESIGHT CORRECTION