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? WHY THE WEATHER ??

Dr. Charles F. Brooks,
Secretary, American Meteorological Society.
describes:

THE LIDS OF THE AIR.

Wherever a layer of warm air rests upon a layer of cool air a "lid" or "Ceiling" is formed. It is more than a name: it is a tangible obstruction well known in aviation, for the airplane that passes through it may get a smart bump, and a lightly ballasted free balloon descending upon it may rebound and shoot upward several hundred feet. The reason for its formation is that the air of adjacent layers do not mix readily one with the other, unless there is a strong wind or powerful vertical currents. Smoke, dust or cloud matter rising to the top of a stratum or sinking to the bottom, does not always penetrate, but spreads out laterally, forming stratus clouds. Under favoring conditions there may be a succession of lids in the atmosphere, one above another, each representing the top of a cool layer.

A low lid impairs visibility to a marked degree. An extreme illustration is the famous London fog, where the products of burning soft coal, held below the lid, produce a pall-like covering, through which the sunlight penetrates but little, thus producing the effect of night in the daytime. Not until increasing wind or general cooling breaks the lid is a clearing of the atmosphere effected.

(Tomorrow: Billow Clouds)

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