and perhaps phosphoretted hydrogen. A peculiar organic matter is also found, in considerable quantity, besides various vegetable matters, as the debris of plants, and infusoria and insects. The ascentional force given by the evaporation of water seems to be sufficient to lift into the air insects of comparatively large size. Spores and sporangia of a little algoid plant exists abundantly in the water of the marshes near Rome, and has been found in the air of Rome and its vicinity. Balestra is inclined to attribute marsh fever to this widely diffused "microphyte granule."

The peculiar organic matter referred to, found in the air of marshes, blackens sulphuric acid when such air is drawn through it; it has a flocculent appearance and sometimes a peculiar marshy smell. It is said that ozone lead through a solution of it did not destroy it, and that it destroys quinine: this would be the case, probably, only when in its concentrated form.

Dampness of soil may affect the health, through the air, in two different ways: First, simply by the effect of the water, *per se*, causing, with a cold soil, a damp, misty air; and second, by favoring or aiding in, the evolution of organic emanations—of miasmata, of a more or less poisonous nature, which pass into the air and contaminate it. When the damp soil is strongly impregnated with organic impurities—animal or vegetable—the contamination of the air by organic effluvia is greater. The effects of these impurities are modified or lessened by vegetation. Hence, in the preparation of sites for camps, for military purposes, Parkes recommends that, in clearing away brushwood, the ground, in the tropics especially, should be disturbed as little as possible; and if it can be done, all cleared spots should be soon sown with grass seed.

MALARIA—BAD AIR.—By this term is usually understood the effluvia from the marshy soil which give rise to paroxysmal fevers; such as, in this country, intermittent (ague), and remittent. The cause of these fevers appears to be some special and constant agent, produced by some kind of decomposition or fermentation going on in the soil; and for the production of which the following appear to be essential conditions: organic matter in the soil, moisture, heat, and limited access of air. It may prevail on chalky, limestone, sandy, and even granite soils.

Malaria is given out abundantly by alluvial soils, especially by those most recently formed. Mud banks on the sides of large streams, when only occasionally covered with water, may be highly malarious.