like the white of the eggs; others are hard and cheesy and very yellow in color, sometimes these are greatly inflamed; other yolks appear like a custard that has curdled, and they usually have a very offensive odor. The ceaca, or blind intestine, is frequently filled with a cheesy substance.

The white spots in the chicks' lungs are generally considered to be due to the growth of a common mould. This may be in the eggs, or more frequently comes from moldy feed or litter. It is much more troublesome in damp, dull weather, when the chicks are most inclined to stay under or near the hover.

## REARING CHICKENS.

Experience and observation has led me to believe that chickens, in order to do their best, require to be grown on fairly good land, probably a clay loam or a sandy-loam being the best. I have never been successful nor yet have I seen good flocks of chickens grown on very light sand. Chickens require dry ground at times, yet, at the same time, a rather moist location near by renders a good foraging ground.

Young chickens require plenty of ground to range over; some convenient shade, such as fruit trees, or growing corn or artichokes; tender green food and insects. Many growers of large numbers of chickens on limited areas crowd the birds far too much, the result being a large proportion of unthrifty chicks. These last mentioned chickens have been very much in evidence on nearly all the large, intensive poultry plants that I have visited. The chicks frequently outgrow these conditions to such an extent that they are very difficult to pick out when mature, but are readily seen when about one-half grown. Many growers appear to believe that as long as a chicken is alive it is a good one, but this is folly. I believe by breeding from such stock the vitality will gradually decrease until we shall reach a point where eggs are practically unhatchable.

Chickens when taken from the nest or incubator should be placed on ground upon which no other chickens have ranged that season. range or run for a chick during the first four weeks of its life need not

be large, but it should be fresh.

Many make the mistake of putting late hatched chickens on old tough sod, the green grass (if there is any) being so tough that the chicks cannot break it, and often the grass too thick to admit of a chick catching an insect before it is out of reach. I much prefer a cultivated piece of ground. A little tender lettuce, or rape, or even weeds for green food are preferable to summer sod, or grass. But after the middle of May the cultivated land gives better results than grass land.

A corn field well cultivated appears to be nearly an ideal place for

raising late hatched chicks.

Chickens hatched in an incubator can be reared either with hens or