

to the chimney, and the covers over the fire-box are lifted. Everything being in readiness, the fire may be built. First put into the fire-box a generous layer of shavings, or wisps of paper twisted in the middle so that they may lie loosely in the box; above these put in, crosswise, short pieces of soft wood that lights readily, and then, in the same way, pieces of hard wood that burns more slowly; above these put one or two shovelfuls of coal. Cover the top of the range, and apply a lighted match between the bars of the grate to the shavings or paper: when the wood is fairly ignited, add coal to fill the fire-box nearly even to the top of the bricks. The coal will settle down as the kindling burns. The fire-box should not be kept more than three-fourths full; much less coal even will do the work in a family of ordinary size. When the blue flame disappears, close the stove door, leaving the damper in the door open. Adjust the damper in flue to send the current of hot air round the oven, instead of directly up the chimney. To check the fire still further, close the damper in the door, and open check-draft above; this lets in a current of cold air above the burning coal, and thus gently diminishes the strength of the draft. To keep a steady fire, add a few pieces of coal, occasionally, as the top coals begin to glow. After coal has once become glowing red in colour it begins to part with its strength. Keep in mind that air below a fire causes it to burn briskly; air above cools and deadens a fire; also the fact that most food is subjected to too much rather than too little heat.

THE FIVE FOOD PRINCIPLES

Now, there are in every food product certain compounds upon which its food value almost entirely depends, and there is danger that the full nutritive value of these may not be retained in the process of cooking. Then, too, we have become accustomed to combine, in cooking, materials that are widely different in chemical composition. All this tends to make the process of cookery very complex. As, for instance, in making an English cream, in which cornstarch, or flour, and eggs are used. Starchy substances **are made more soluble**