

The reasons for the more satisfactory working of the hot water press are very clear. The cheeses of slumgum being submerged in hot water, the pressing is repeated at intervals, each pressing squeezing out water and wax and each releasing of pressure allowing the slumgum to expand and absorb hot water. The result is that the hot water washes or forces the wax out of the slumgum so that, except a very small residue unprofitable to try to obtain, the slumgum finally contains nothing but water in absorption, and all without the necessity of cooking and pressing more than one time through the extractor.

It is otherwise with the steam press. With it but one pressing is made and even repeated pressings would not avail to accomplish the work in the same thorough manner as is obtained by the use of any of the hot water processes. Oft repeated and carefully executed experiments have demonstrated that the steam press will necessarily leave in the slumgum a large amount of wax, held there by capillary attraction together with a certain amount of moisture which no amount of pressure will expel. The process of subjecting a mass of slumgum to great pressure results in rendering its surface hard and compact, which greatly impedes the escape of wax from the less compressed interior portions. Obviously the thicker the mass of slumgum the greater will be the proportion of wax held back from escape through the constantly hardening exterior of the mass as the pressing continues, and, as in a thick mass the wax has a greater distance to travel to become free, the surface becomes too compact for escape of wax before it is reached. None of these difficulties are present in the hot water process, the intermittent pressure operating to ultimately expel the wax so that, within fractional limits, the wax is secured and only water and a trace is held in capillary attraction.

The solar extractor is popular with most bee and honey specialists. Its economical use is confined to cappings and comparatively new comb that is rich in wax. Its use is not to be recommended for old comb, as the large percentage of foreign material acts as a sponge to hold the wax and prevent it from being released when melted. Slumgum from the solar extractor contains over 30% of wax as a rule. The ease with which wax may be obtained by the use of the hot water press has caused the solar extractor to go out of use with the writer, and I am quite certain that wax produced in the solar from the same kind of materials, cappings or old comb, that is produced from the hot water press would be no better from the point of quality. Be it remembered that such rich and superior materials as white cappings will make the finest quality of wax if simply melted and strained. As the product of the solar extractor is mostly cappings and other high grade materials it is not surprising that it has a good reputation for turning out a fine quality of wax. When it comes to old comb the solar extractor will not take out enough wax to pay for operating it.

A word of caution in the operation of hot water presses may be beneficial to some who have not made the matter a study. The cheeses should not be made too thick. The shorter the distance the wax has to travel to become free the quicker and cleaner will be the work. Better make more cheeses and have them not over half an inch to one inch thick when pressed. When pressing it is profitable to avoid being too hasty. Turn the screw down gently at first, the gradual pressure permitting the wax and water to escape from the cheese. Do not turn the screw down as far as it will go at the first pressing, but when down as far as it will go with very moderate exertion, reverse the motion and release the pressure. This will allow the cheese to become saturated with water again

and when the pressure is released a few minutes afterwards the wax will come out with it more easily. The screw may be turned a little farther until the cheese is completed. By proceeding with the intermittent pressing with hot water washed out of the surface a trace of it remains in the cheese the best retained is a loosely woven cloth or burlap as it is found in Bran bags cut up in are good material.

Wax is one of the finest materials to cleanse of foreign matter the reason that it is lighter in gravity than the impurities usually associated with it has a few particles of dirt or they are made to settle by stirring they may be removed fairly fine results are obtained in a deep vessel. Fine material that are heavy will settle to the bottom and be removed from the cage.

Never use acid in the process if it is necessary. When the wax is so dark and dull appearance as to greatly reduce its value the use of acid you can increase its value and increase its color of wax has been polished but very little in the manner of using necessary to produce

Suppose you have that it is desired to have the wax in about a