

The quantity of water, must be regulated by the strength of the glue or size required; allowing one pint of water, for an ounce of glue, or 2 gals. for a pound of glue, for single size.

The hide-roundings require one gallon of water for 16 oz.; alumed leather, chamois leather and gloves' clippings, 1 gal. per 20 oz.; hare and rabbit skins, 1 gal. per 24 oz.; fellmongers' shreds, 1 gal. per 28 oz.; and parchment cuttings, 1 gal. per 50 oz.

The exact quantity of water, ought first to be put into the boiler, according to the quantity of size intended to be made; and when the article to be boiled into size, is added, the depth or quantity of liquid required to be constantly maintained, till the gelatine is extracted by the boiling, will be correctly ascertained; and any visible waste occasioned in the boiler, during the operation, must be continually supplied, by adding the necessary quantity of water; or, otherwise, considerable time will be lost in the process.

An iron pan or boiler is much better than any other, provided that care is taken to add cold water, by a little at a time, while the boiling is continued. And it is also necessary to have an iron grating placed inside the boiler, in order to prevent the article from burning to the bottom of it, and to lessen the time and trouble required in frequently stirring it.

[Manufacturers' Assistant.]

*On the fallacy of the prevailing opinion, that a Candle burns away the faster for being snuffed.* By BENJAMIN BABINGTON, Esq., M. P.

It is a commonly received opinion, that a candle, when regularly snuffed, burns away much faster than when suffered to burn without snuffing; and hence people submit to the very great loss of light, occasioned by that neglect.

Mr. J. I. Hawkins, many years ago, made experiments, by which he proved, that a candle does not burn away the faster, in consequence of being snuffed; and we are glad to find his experience again confirmed, by the following accurate experiments, made by Mr. Babington.

He had six candles of the best tallow, cast in the same mould, with wicks of twelve threads; these he burned for one hour, in an apartment in which the air was unagitated, and at a temperature of 55°. He first performed the experiment by snuffing them every ten minutes, and then without snuffing them at all; being desirous to ascertain what difference in the combustion, the snuffing would cause.

The loss, in weight, of those which were snuffed, varied from 100 to 106 grains: those which had not been snuffed, from 97 to 106 grains. It thus appeared that the consumption of material, in a tallow candle snuffed at intervals of ten minutes, is only 2.75 per cent. more than in a candle not snuffed; a difference very inconsiderable, compared with the difference of light produced. [Tech. Rep.]