should be marked in thousandths of an inch. It is the only method that makes sense. Suppose inches were named by some terms such as 1X, 2X, and so forth, but when you bought a foot of material made by one manufacturer it measured more or less than an actual foot? Since 1930 I've been advocating actual measurements in place of the other system, and while the old way is still in use many firms now include the actual calibrations as well.

A tolerance must be allowed in calibrations for both materials, as the synthetics do not run any truer in calibration than does best grade drawn silkworm gut. This should not exceed more than  $.000\frac{1}{2}$  (one half of one one thousandth of an inch) either plus or minus. Thus in the smallest sizes you may find 4X and 5X, or 5X and 6X running to the exactly same calibration.

There are at least five different grades of silkworm gut, and a number of basic manufacturers. Undrawn gut is the strongest but it is difficult to get long strands of even calibration. "Selecta" is the best grade, and much more expensive than the others. Drawn gut is natural gut that has been pulled through a perfectly round hole in a diamond. Its sizes range from .016 through .005, and of course the strands are round and uniform in calibration, thus making the manufacture of leaders with it comparatively simple. In sizes smaller than .009 or perhaps .008 it is rare to find perfect undrawn strands, and as a rule the drawn sizes .009 through .005 are used for leader making even though the balance of the leader is of undrawn strands.

Silkworm gut, incidentally, is not the intestine of the worm; it is the viscous material from which the creature spins its silk, taken from the silk gland just before the worm is ready to spin. Drawn out, while still soft, to the desired thinness, it hardens soon after exposure to the air and takes on the familiar form in which it is used for making leaders.

A good floating preparation for your fly is quite important. Something that cleans as well as waterproofs is an advantage. As far as I am concerned, two ounces of paraffin dissolved in one pint of non-leaded gasoline makes a good concoction for the purpose. It not only waterproofs the fly by depositing a film of wax on it, but also acts as an efficient cleanser. This last property is especially acceptable after a trout has taken a fly deep and when you take it

<sup>1</sup> Ethyl gas is no good for this. It must be non-treated gasoline.

out of the mouth it is bloody and matted. Simply dropping the fly in the bottle and giving it a few shakes with your thumb over the top will make it sprightly and fresh. Of course the fly is left on the leader. This is the best way to use this dope. To put it on with a brush is not so good—you might just as well use any other mixture. For this reason a large-necked bottle is necessary. These are easily obtained from any druggist. After the fly has been dipped, it should then be whipped in the air a few times. This gets rid of the excess gasoline and starts evaporation of the balance. Then you should dap it on the water of the stream. This congeals the diluted wax film. By the time you make the cast, the liquid oil has disappeared and you have a treated fly that does not leave a film on the water. Carbon tetrachloride, ether, or benzine may be used in place of gasoline.

There are two objections to using this preparation. One is serious. In dipping the fly the oil gets on the leader and sometimes makes it brittle. However, I have never had much trouble in this respect myself, although some others have. The other is that when the temperature gets below 60° the wax congeals. To prevent this I carry it in such a way that the bottle may be slipped under the jacket at times when it is necessary. The warmth from the body then keeps it in good condition.

To make this preparation, shave the wax and put it in the bottle with the gasoline. If you feel like fussing, keep shaking the bottle to dissolve the wax; otherwise place it in the sun and let the heat do it. Don't put it on a stove.

There are, of course, many excellent fly-floating preparations on the market, and if you do not feel like making your own, you may find one that suits your particular needs among them. However, I would advise against too oily mixtures and ones that do not evaporate or harden readily. This type is not particularly satisfactory and of course does not clean your fly. Some anglers prefer using a paste grease, rubbing it on with the fingers. This is excellent on a new fly, if done carefully so that the hackles are not matted. However, when using it on a fly that has caught a fish, it is first necessary to wash and dry the fly. This not being necessary with the gas-wax combination, you can readily see where the latter can save you much time when experiencing a short but spirited rise of trout. Under such circumstances the time spent in drying out a fly may well