

strained to state in brief that what he says does not carry conviction to my mind.

As to his first postulate I may indeed say that "we can not be sure" of anything. Fabricius has been dead for over a century, and not even through Sir Oliver Lodge or Conan Doyle can we get into touch with him and ascertain definitely what he was thinking about when he first coined the generic name we still use. But we do know that he had the *habit* of coining generic names from those of ancient towns and cities. The word *Tingis* had been in existence two thousand years before Fabricius was born and in its Greek form Τίγγις and in its Latin forms *Tingi* or *Tinge* could be found in any dictionary Fabricius might have consulted. The word was no more "his own" than hundreds of other words he used in his writings. It is difficult for me to believe that Fabricius out of the depths of his subconscious mind fished up an altogether arbitrary combination of letters, *T-i-n-g-i-s*, making out of them, as Professor Parshley says, "his own word." The nomenclatorists of the time of Fabricius had not yet reached the stage attained at a later date by some of their successors, who took random combinations of letters and then by various transpositions and combinations manufactured words without meaning, which they employed for generic and specific terms. Fabricius was a disciple of the old Linnean school and used the Latin language. I question whether he had a sense of "proprietaryship" in words.

The fact that he employs *Tingis* as the genitive only shows that he thought that this was the genitive, after the analogy of some other words in the Latin language, and that he did not take the trouble to ascertain what was the true declension of the noun he was employing. *Humanum est errare*. The genitive of the Latin noun *Tingi* or *Tinge* (the equivalent of the Greek Τίγγις, must have been *Tingitis*, as shown by the adjectival form *tingitanus*, used by Pomponius Mela, Claudius Mamertinus, *et al.* Fabricius simply made a slip in his declension, which it was easy enough to do.

With all due respect to the conclusions of Professor Parshley I contend that we are dealing with an old Latin word (found also in the

Greek, where it has an *i-stem*) and that *Tingitidæ* is the correct form of the family name, sanctioned by the use of such eminently capable scholars as Stål (by the way, an excellent linguist), Champion, Oshanin, Horvath, Osborn, Drake and a multitude of others.

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A MINIATURE PHOTOGRAPHIC DARKROOM

NECESSITY has mothered many an inspiration. This trite exclamation was brought to mind by the sudden need of providing dark-room facilities when our commodious attic quarters were closed in order to lessen fire risk. Two alternatives suggested themselves, either to partition off a corner of a room or to construct a portable light-proof developing box. Past experience with small stuffy darkrooms was recalled, and the writer accordingly undertook to build a dark box as a venture. The convenience of this box, its adaptability to many photographic purposes, and the successful results following its use have led to the publication of this announcement in the hope that others, at present deterred from attempting photography through lack of facilities, may find that the way is easily open.

This miniature darkroom is constructed of pressed wood-pulp board nailed over a light wooden frame. Dimensions of 36 inches for width 24 inches for depth and 20 inches for height have proved to be entirely satisfactory. At the lower part of the front face an opening of about 24 by 10 inches admits the arms and hands of the operator. This opening is rendered light-proof by two thicknesses of close-woven black sateen cloth continuous with two sleeves. By having the cloth considerably larger than the opening and shirring the edges, free movement of the arms is afforded by the bulging central portion. The ends of the sleeves are made close fitting by elastic bands. Black sateen bloomers can be bought ready made and are of the exact pattern and size, with shirring and elastic fittings ready for attachment to the box. Because of looseness of weave, two superposed layers of cloth should be used.

The top of the box has a removable light-

tight cover. This is made possible by tacking a tongue of half-inch stripping around the edge of the cover to fit into a trough at the top of the walls. The tongue and trough are painted matt black, a little lampblack in weak alcoholic shellac answering for this purpose. The interior of the box need not be painted, although a white coat affords a better view of manipulations in the interior.

To view what is going on inside the box two small windows are provided at the level of the eye when the box is set on a table. The window in front is of clear ruby photo-safe glass, the one opposite is either of ruby glass or translucent ruby fabric. Behind the rear window is placed an electric bulb operated by a switch inside. Another inside switch controls a socket on one wall which may interchangeably have a low candle-power light for lantern slide making or a high power light for exposing development papers. A shelf located midway across the end is an added convenience. The entire cost for materials is five dollars; a few hours of labor can construct the box.

A secret of continued success in using this small darkroom is to keep hypo away and thus avoid contamination. This is possible by having a tray containing weak acetic acid, about 2 per cent., into which is to be immersed plates, slides, films or prints as fast as they are developed. The acid checks the action of the developer and permits the quick removal of the light-sensitive materials from the developing box to the hypo bath outside without danger of fogging. Developed material can be left in the acid bath until it is convenient to open the box.

The idea of a developing box is not new. There are small developing tanks and boxes on the market for daylight use by the time method of development. Convenient changing bags of cloth have long been employed by the traveler. Developing boxes equipped with sleeves and ruby glass are available with X-ray outfits. Undoubtedly the urgency of the war period for rapid photographic production led to the construction of portable darkrooms. But the simplicity, adaptability and convenience of the above-described miniature darkroom are so great that the writer will be pardoned, even

though his discovery is not new, if this announcement will acquaint others with a worthwhile piece of equipment.

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THE VALUE OF COST ACCOUNTING IN ANALYTICAL AND CONSULTING LABORATORIES

THIS subject has had very little, if any, consideration in the past. The probable reason for this neglect appears to be the comparatively small field for analytical and consulting laboratories.

Through the long association with this field the writer has worked out an elaborate system of cost records which have proved most valuable in the determination of a fair price to clients as well as a fair return to the owners. This system produces such information as will show what work is profitable and what kinds of analytical tests are unprofitable; the reasons for the profits or losses are readily revealed after a persistent tabulation of the records.

The latter information serves to permit the preparation of sliding scale prices, *i. e.*, for one test, for two tests, for three tests, etc. It also reveals the comparative fluctuations in the costs on a given test. This variation in costs should always be treated with the utmost care, as when a worker becomes so proficient that he does not require the assistance of any of the usual factors in a laboratory, and finishes the job in record time, the owner as well as the client is entitled to a little of this efficiency in dollars and cents. The owner should weigh the costs in these cases against the reasons why that worker is proficient in making these certain tests and allow himself leeway for either the replacing of that man or the increasing of his salary. An efficient and speedy worker generally secures his knowledge by repetition principally, by use of the owners' books and the supervision and advice of his chiefs. In other words, the speed and efficiency of one worker is not the only basis for costs.

The costs when compiled in a comparative form will readily show the variations, the causes being numerous. Some of them are represented in the unfamiliarity with the