

pointed to look after it, there was found stock, in the shape of broken reams, quires and trimmings, to suit nearly the entire small job work of the house for many weeks!

In the composing-rooms of larger offices there is great need for correct economy. The purchase and care of large quantities of valuable material is something that should receive closer attention than most employers are apt to give. In this department is stored almost the most expensive part of the capital invested. A careless foreman, or a lot of cheap and incompetent workmen, are about as certain means as can be employed for its total ruin.

Next to the composing-room is the press-room. Here care, competency, and real interest in the affairs of the concern should be prominent, as a security to the economy of its management. Work can be spoiled; machinery damaged, and many other errors wrought, that to place such a department in wrong hands, because cheap, would be worse than false economy—it would be folly. Yet there are many establishments run just on this basis.

Look into these facts, and give some thought as to why you do not make more money than you do on the capital invested. With the right kind of assistants, we believe a satisfactory result can be obtained. It is in carrying out the more thorough methods of an extensive business, that true economy becomes apparent; and it is by a wise exercise of it, that any of the first-class printing houses have succeeded. Cheap labor, thoughtlessness, and a disregard of values, is a sure precursor of business ruin. False economy will not prevent it. By false economy we mean those petty systems so often adopted because they *seem* cheap.

Gold Leaf.

Gold leaf, in addition to its use to bookbinders, is required for gilding, in order to ornament different parts of buildings, more especially the interior fittings, such as the mouldings of the joinery, the decorations of the ceilings or walls. It is classed as *singles*, *doubles* or *trebles*, according to its thickness, and sold in books, each containing twenty-five pieces, whose dimensions are three and a quarter inches square. They are placed between the paper leaves of a book, which are rubbed with red chalk to prevent the gold from adhering. The book should be warmed before using, so as

to make the leaves quite dry and easy to detach one from another.

Gold-beating by hand is tolerably simple. The hammered metal, brass, or tin plate, is laid on a massive anvil and beaten with hammers; to produce the greatest expansion of the metal the hammer and anvil must be convex; the convexity of the latter is of great influence. The sheet becomes so thin after a short time that the further beating must be done with the sheets between animal skins. Great care must be taken that the skin is perfectly even, and covers the whole of the sheet, which must be smaller, so as to give room for extension. The beater endeavors never to strike twice consecutively in the same place, and moves the skin after every blow. It requires considerable practice to ascertain when the body of the metal has the required thinness, as a fold will be produced by any doubling, and the separation of the leaves, sorting, etc., must be done carefully between tissue paper, all draught being guarded against during the operation.

There are several different tints of gold leaf, varying from deep orange-red down to a pale silvery hue. Gold leaf made in England is thicker and larger than in the United States. Pale leaf gold is an alloy of silver and gold beaten into leaf. Dutch gold is copper leaf colored yellow by the fumes of molten zinc. It is much cheaper than gold leaf, and useful for large surfaces, where it can be protected by varnish. Without such protection it becomes discolored. Bessemer's gold paint is in the form of a powder. It is mixed with a little transparent varnish, and laid on with a brush.

— *Exchange.*

How Printers are Made.

There are many men who never were, and never will be, printers, simply because they once thought it too much trouble to thoroughly master the nice little technicalities of their trade. They looked upon rule and figure work as fidgetty, bothersome employment, and thought it waste of time to clean up when colors began to go dirty.

Such men as these are stamped with the word "Failure," and failures they are, accordingly. They may be very good as compositors, reasonably rapid and correct in their style of picking up, and their matter, when on the galley, may be on its feet, evenly spaced, and properly justified. But take a man of this description from the case and put him at the stone—the test will