

**A New Combustible.**

"I see the mention of a new combustible, invented by a gentleman who very appropriately bears the name of *Stoker*. It appears to be very pure charcoal, finely ground, and made into a paste with starch. The paste is then molded into cakes or balls of different sizes, and then dried. When perfectly dry these may be lighted with a lucifer match, and will continue to burn steadily, like German tinder, without giving flame or smoke. The combustible is intended for heating urns, chaffettes, etc."—*Paris Correspondent of "Chemical News."*

**Independence vs. Impudence**

There is no trait in a workingman's character which commands more ready respect than a manly independence. This is true of employer as well as apprentice boy. A man of known independence is treated with respect and consideration by those holding superior positions; and why? Simply because that any treatment short of proper will not be endured. The independent man knows his rights and dare maintain them.

Independence is always founded upon ability; the workman feels his capacity to sustain his position without cringing to the frowns of elevated incapacity, or bowing submissively to purse-proud, ignorant, employers.

Independence, while demanding proper treatment for its possessor, dare, at the same time, give the same to all others, irrespective of position. An independent man, while demanding an apology where one is required, has the manliness, if in error, to make one himself to either superior or inferior.

Independence, like all genuine meritorious traits, is liable to be counterfeited, and its counterfeit presentment is impudence, which is always founded upon just the reverse of principle, from which springs true independence.

Impudence is always the signboard of ignorance; the impudent workman knows not what treatment he should receive from his employer, or how in return, he should behave towards him, but thinks that a saucy tongue is always in order, and that, upon all occasions, it is proper for him to show the little respect he has for his employer or his fellow workman. This is to be regretted from the effect it has upon those just entering life as mechanics; they invariably consider the least restrictions upon their actions as meriting insubordination; the impudent, incompetent, is made their beau ideal of what an independent man ought to be, while the unostentatious worth of the really independent man is looked upon as a truckling fellow, one who will suffer in preference to assuming a self-defense. A greater mistake is never made than when impudence is considered a mark of moral courage, for the two are never found in the one person, while true, unostentatious independence is allied to and accompanied by true courage.

Impudence is ever trying to hide its defects by bluster and assumed worth, knowing well that if it could be turned inside out that it would be found to be utter worthlessness; while independence is satisfied to let time and circumstances define the true bearing of all minor questions.

Men, as well as apprentices, should bear in mind that impudence is not independence; also, that

while an impudent man is never independent, an independent man is never impudent.—*Fincher's Trade Review.*

**The Great Pyramid.**

The Great Pyramid required for its construction twenty years, and the labor expended upon it has been estimated as equivalent to lifting 15,733,000,000 cubic feet of stone one foot high. If, in the same manner, the labor expended in constructing the London and Birmingham Railway be reduced to one common denomination, the result is 25,000,000,000 cubic feet more than was lifted for the Great Pyramid, and yet the work was performed in less than five years. The number of men employed in the building of the pyramid was, according to Herodotus, one hundred thousand; in the latter case the work was performed by about twenty thousand.

**Where Fat and Flesh come from.**

They come from the earth and the atmosphere, collected by vegetation. Grass contains flesh; so does grain. The animal system puts it on from these. Vegetation then is the medium through which the animal world exists; it can exist in no other way. When grass or grain is eaten, the flesh constituents are retained in the system; so also the fatty substance—that is, the starch and sugar from which fat is made. Some grains have more flesh than others; so of the qualities that make fat. In a hundred parts of wheat, according to Piesse, are ten pounds of flesh; in a hundred parts of oat meal nearly double that amount. Hence oats are better for horses on account of their flesh-forming principle, rather than fat, as muscle is what a horse wants. For fattening purposes, however, corn and other grains are better.

When flesh itself is eaten, the system but appropriates what is already formed, but would as readily take it from vegetables as from flour. The flesh-making principle—or the flesh itself, in its constituents—goes to form cheese in the dairy; the starch, &c., butter. Hence it is that some people assert that cream has little influence in cheese, farther than to enrich it; for cheese and butter are entirely distinct. The same kind of food is equally good for the production of either. This is a point of considerable interest, and is not yet fully explained—indeed, is yet in its infancy, and a plant in its different stages of growth has a different effect. The fat of the plant is held in reserve for the seed; nothing is wasted in leaves, wood, &c.; the precious seed must have it. Hence, when this takes place, the stalk is comparatively worthless to what it is prior to the change. And the fat cannot be appropriated so well in the seed as when it is diffused through the stalk. Tender herbage, therefore, is the best; and when secured before the direction of the oil takes place, so much the better will be the hay.—*Coleman's Rural World.*

**Luminous Hats.**

A man has just taken out a patent for luminous hats. They would, he says, preserve the wearers from being run over by cabs at night, and would, to some extent, enable the saving of the lighting of streets with gas to be effected.—*London Paper.*