

Cauliflower, Peppers, Eggplant, Sweet Potatoes, and Tomatoes.

Tomato plants can be set in the open ground by the middle of the month, and with a little care and protection in case of a cold snap they will grow right on. I have always found it best to stake the early crop, and train to one stem. The fruit will ripen earlier and better than on the ground.

When the ground is dry enough to work, keep a dust blanket on the surface, to conserve the moisture.

—G. S. ARTHUR

### What Is Efficiency?

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Science is the classification of facts into basic laws or principles.

Mr. Emerson has designated thirteen of the underlying principles of efficiency, the knowledge and practice of which enables one to *classify, locate, measure, and eliminate wastes*. They are:

*Definite Ideals*

*Standardized Conditions*

*Standardized Operations*

*Written Standard Practice Instructions*

*Standards*

*Definite Planning and Scheduling*

*Despatching*

*Records*

*Discipline*

*Competent Counsel*

*Common Sense*

*The Fair Deal*

*Efficiency Reward*

*Ideals* are that purpose which leads us on—the reason, the cause, the underlying push or pull which makes us want to do our work and do it well.

Personal ideals may be to acquire wealth or social position or worldly fame; to have a happy home and family and friends; to do good in the world, to heal, to comfort, to enrich the store of world's knowledge or music or art.

The ideals of a town may be to make it a safe and pleasant place to live; to reduce crime, vice, sickness, shiftlessness, and poverty; to encourage in their place thrift, health, good comfortable homes; to provide our children with safe and pleasant places to grow and learn.

Ideals may be worthy or unworthy. A criminal may be very efficient in his work, yet wholly undesirable. Germany was so wonderfully efficient that she came near overcoming the whole world. It was only by main strength and wonderful grit that she was held in check until the moral forces of the allies could

be built up to the magnitude and efficiency required to whip her.

*Standardized Conditions*—Grading, smoothing, or paving the road over which we must travel, so that our wagons will not be mired. Removing the obstacles which do nobody any good. Not allowing your negligence to interfere with the other fellow's work, and not allowing his carelessness to hinder you. Making sure that you get materials uniformly good, and of the right kind. Selecting the right equipment, keeping it in good repair, well oiled, and ready for service.

*Standardized Operations*. Study out, try out, and select the best way to do everything, and stick to that one best way—no more, no less, always the same.

*Written Standard Practice Instructions*. Moses had the ten commandments carved on tablets of stone. There were not only ten perfectly definite rules and guides to conduct, but the Lord was wise enough to have them permanently written down. "Thou shalt not steal"—plain, simple words, which the simplest mind can understand, yet if passed from mouth to mouth, and perpetuated by means of hearsay, would be mutilated beyond recognition, interpreted to suit one's own desire, so as to lose completely the original intent.

One's mind has so many ideas stored away for future reference, such a constant demand for one and another of them to be recalled, and such a quantity of constantly accumulating new ideas, that, whenever possible, the more important general instructions should be written.

*Standards* are the gauges by which we gauge our performances; the square against which the carpenter squares his timber, the plumb line and level by which the brickmason keeps his work true, the clock which governs the distribution of our time day after day. Standards insure that each day does get its full quota of hours, that each pound of butter weighs as much as any other pound, that each quart of milk contains thirty-two ounces, and that the ounces are the same on Tuesday as on Saturday. Standards establish one piece or ten pieces or a hundred pieces as a fair day's work for a man. Standards establish certain quality as the proper thing to expect. Without standards we are hopelessly drifting; we do not know whether our results are very poor or very good; we cannot know where to look for trouble, for we do not even know that there is trouble. Often we unconsciously

manufacture standards out of our own mind and memory, by comparing against some past performance. Such standards are rough, of course, but better than nothing at all. It is better still to get the best available advice on the subject, sit down, think it over, study it out, and establish a standard which has a really sound and reasonable basis.

*Definite Plans and Schedules*. A little time devoted to thought before beginning an undertaking will often save hours of wasted effort and discouragement, perhaps defeat. Imagine the allied armies fighting without definite, pre-arranged plans and schedules. Imagine building a skyscraper, or a battleship, without designs, and without materials ordered months ahead. Imagine the builder measuring for each piece of steel and wood as he needed it, waiting for the material to be made, then laboriously fitting it. How long would it have taken us to build even a sub chaser? Imagine the satisfaction of traveling if trains had no schedules, the pleasure of meeting a slow freight train at any turn of the road. It is almost beyond imagination.

*Despatching* is the carrying out of the plan according to schedule.

*Records* multiply our sight a hundred-fold; bring before us in condensed form the happenings of the day, the night, the far away. Records should be made to show us whether we are meeting our standards or falling behind, and where and why we are gaining or losing ground. Records should be *reliable, necessary, immediate, and adequate*.

*Discipline* refers not to harsh words, "strong arm" methods of dealing with people, and the influence of fear. Instead it means good habits of thought—willingness, contentment; good habits of work—industry, co-operation, harmony; in few words, call it the *spirit* of the place.

*Competent Counsel* teaches us to get advice from every competent source—not merely the physician, the lawyer, the banker, for they are only three of the world's many advisers. Nearly every human being in the world is a specialist at something. Foremen are specialists in the handling of men; workmen are specialists in the art of doing certain operations; teachers are specialists in the art of inducing children to enjoy learning. Books and libraries are a great storehouse of knowledge, which we must learn to use. Even animals and plants are counted among our most trusted advisors—for example, the watch