

APPENDIX

A FEW TRICKS OF SOME TRADES

Here are a few sample illustrations of the best methods of working at common activities with the greatest efficiency. In each case, the procedure should be applied with whatever variations you may need to fit your own age, sex, energy level, and the like. Probably nine out of ten of you may follow these suggested methods almost to the letter.

TYPEWRITING

The ability to use a typewriter saves more time and energy than skilled operation of any other common instrument. Every child over twelve and every adult should know how to type. For the value of typing goes far beyond its obvious uses. It not only develops the basic dexterity of co-ordinating eye-finger and eye-hand movements. It also forces attention upon language, which is a mind-tongue dexterity. Particularly if pursued with a clear idea of developing its extra values, typewriting improves habits of vocabulary, grammar, and clear, precise expression in written words. Young people could probably profit greatly by typing two pages a day of anything at all, provided each daily passage included a different vocabulary and different manner of expression. First, they should type copies of passages from any books, newspapers, or magazines. Then they should rewrite the copy using only half the original number of words, but keeping the main points. Any form of precise writing by typewriter is extremely useful in developing the major skills of eye-finger and mind-tongue co-ordination.

When typing, hold your body upright. Strike the keys lightly and rapidly. Many people achieve easily a speed of six to eight strokes a second. Work steadily and at as regular a speed as you can. Frequent stops waste energy. In ordinary typing, such as copying, learn to do the work automatically so long as you are not trying to build up vocabulary, improve grammar, and the like. Concentration of attention in typing promotes fatigue. Learn the touch system, of course.

WALKING

On a horizontal surface, you progress with greatest economy at about 2.8 miles an hour. This pace, says Jules Amar,* enables an unburdened man to cover 28 to 31 miles a day with a two-minute rest every half mile or thereabouts. When carrying a burden of 44 to 48 pounds, slow down to 2.6 miles. But you get maximum perform-

* "The Physiology of Industrial Organization." Jules Amar. London, 1918. Several of the methods which I describe are discussed more fully in Amar's studies, including his book, "The Human Motor."

ance carrying a load of 99 pounds walking three miles an hour for seven and a half hours daily, resting for two minutes every 650 yards. An adult between 25 and 50 can thus cover an average of 16 miles a day. But if he speeds up to 3.4 miles, he reduces the distance covered by almost half, no matter how often or long he rests.

GOING UPSTAIRS

Walk upstairs at the rate of about a step a second. In carrying burdens upstairs, you accomplish most under the following conditions: carry a weight of 88 pounds at the rate of 1,370 feet an hour. Do this for only seven hours at a stretch, and rest for two minutes after each vertical uprise of 26 feet.

RIDING A BICYCLE

The normal rate of riding a bicycle is also the most economical. Here you pedal 45 or 46 revolutions a minute, and cover 9.94 miles an hour. Be sure the saddle and pedals are comfortable and that you don't lean too far forward. The ground you can cover daily depends on your physiological condition. But if you race, never drink alcohol in any form.

If you carry a load on your bicycle, its weight should permit you to cover at least an average of 3.1 miles an hour without undue effort.

FARM WORK

Are you a farmer? Or have you recently turned your back on the city to take up your countryside acre and garden? Then use a spade or shovel weighing $3\frac{3}{4}$ pounds and load it with not more than 20.55 pounds at most. Get a two-wheeled barrow holding a load of 220 pounds. If you are heavy, you can do more work with a wheelbarrow than if you are light.

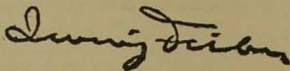
SAWING

In using a double-handed saw operated by two men, you get your best results from regular and moderately speedy strokes at the rate of about 17 or 18 inches and 80 strokes per minute. Stooping is, of course, unavoidable.

HANDLING CORRESPONDENCE

Learn economy in handling correspondence. Here I commend to you Irving Fisher's practice which I reprint with his permission. Not long ago I wrote him to ask whether a suggested time and place would be convenient for an appointment. He returned my letter stamped thus

Please excuse this informal method of replying, made necessary by growing correspondence.



with a "Yes. I. F." written in pencil to the left of my question.

SOME RULES FOR BUSINESS MEN

- Allow work in process only to remain on top of the desk.
- Place unfinished work in a drawer, preferably the top left-hand drawer.
- Place finished work preferably in the bottom, right-hand drawer.
- A desk blotter is usually necessary.
- Place the scratchpad near the center of the desk blotter, away from the edge.
- Never have your telephone on your desk. Keep it on a stand or special shelf, preferably at the left of your desk chair.
- Keep no ash trays on the desk. Put them somewhere to the right of your chair.
- Envelop opener, scissors, knife, hand blotter, etc., belong at the right side of the desk.
- Keep inkwell filled. Place it at the back of the desk, near the center, when not in use.
- Place necessary pencils and pens near inkwell.
- If you use an "in and out" mailing system, place the two trays at the back, left-hand side of the desk.
- Place books and papers on the left side of the desk.
- Schedule all work. Live up to your schedule.
- Allow a definite length of time for interviews. During these, forget all other activities.
- Establish a regular time for daily luncheon periods.
- Be systematic in all things.
- Think constructively of ways and means to perform daily tasks better with less effort.
- Develop good business methods in all things—from art to science.
- Speak directly and to the point in as few words as possible. Do this, too, in writing.
- Beware of the office that looks extremely busy. Most of the busy-ness is probably inefficiency. Lost motion distracts attention.
- Learn to use both arms and hands. Never make one do all the work.

SOME RULES OF CONTROLLED POWER

Don't begin a task before laying out all implements.

Always think of the best methods of doing a job before you start it.

Avoid the common error of thinking of more than one job at a time.

As a rule, stop physical activities while planning the next task.

Avoid short, quick movements of the body and limbs.

Learn to accomplish the most with each simple movement.

Work to the objective of reducing all physical activities to simple movements.

During periods of work, rest periodically, as we have described, regardless of your sense of fatigue.

Place all implements so that you exert the least possible effort in reaching and replacing them.

Try to have most working points near the waist-level to avoid excessive body-bending.