

pumping, working, a windlass, a capstan, the swinging motion in handling a scythe, in felling a tree, heaving at a crane, pulling, pushing.

He can work sitting, kneeling or standing. He pries the pick while in a horizontal position, at a narrow seam of coal between two strata of stone in a coal mine.

Look at him in the handling of an auger which he can work, as in ship building, in every imaginable direction. See him handle a sledge, an axe, a crow-bar or pry or lever, the adze, the plane, the scraper, the brush or broom.

Look at his varied attitudes in the act of dressing, at his contortions in endeavouring to get into a shirt and button it at the collar from behind. See him box and kick and wrestle, walk, run, jump and hop—watch him handle a musket, sword, lance, bayonet, a stick, a sling, a bow and arrow—See him again at cricket, hockey, hurley, le crosse, golf, lawn tennis, ball—at skating, whirling, sliding, plunging, sailing, reaping, rowing, curling, spoiling, swimming, bicycling. See *contrapull* action as in throwing, see him towing, heaving up—and down a ladder, weighing anchor, climbing a pole or rope where his legs are twisted around it below and in opposite directions to prevent slipping while the hands push upward for another grip.

See how in shoveling, every portion of the body may and does in turn become a fulcrum according as the implement is long or short handled, and according also as he must move the material from a low or medium or a higher level and throw it down or up or horizontally, and accordingly again as he has to use the body—knee, thigh, abdomen, stomach or shoulder to thrust the shovel forward, where the material is so compact as to require it.

See how in ditching or trenching he uses the foot and pressure of the body to force the spade into the soil and then, how the back of spade is made to react against the as yet unexcavated portion as a fulcrum and thus becomes a *lever of the first kind*, where the power is at one end, the load at the other, and the fulcrum between the two; while so soon as the spade is charged or loaded, the fulcrum and power change places, the *lever* becoming one of the *third kind* where the fulcrum is at the inner end, the load at the outer and the power for lifting at the center or between the two first; while again when he plies a crow-bar to lift or move a