

**The Best and Cheapest Power.**

The wind-mill has been known and recognized for centuries as useful, but was long and seemingly hopelessly a fickle and inconstant power. To harness the winds to the shaft, and beat down the currents of air to their work, was reserved for the inventor of the Halladay Mill, the pioneer in self-regulating wind machinery. Imitation is sincere flattery, and the number and frequency of attempts to infringe on the Halladay patent are proof beyond controversy that his is an acknowledged good thing, which the dishonest are willing and eager to steal.

The leading feature of the Halladay machine is its being under the control of a regulator, as fixed and certain as the governor of the steam engine. By this water-regulator, in pumping for instance, the mill works just long enough to fill its tank, then turns its blade edgewise to the wind, and "lays off" until the demand for its industry comes round again. So also should a tornado arise while the mill is in operation, it intelligently looks out for itself, and takes in *sau* in the same way, and all this with no attendant.

Especially does wind machinery prove a desideratum when employed in pumping water, on the lines of our railroads at way stations, which has been a large source of expense and trouble to the railroad managers. Steam is expensive; so is hand power; and yet, up to this time, hundreds of dollars annually have been paid at each of the several railroad water stations to raise the water from its source to the tank for the supply of the locomotive. In this department of labor, the Halladay Wind-Mill and the Curtis Pump have formed a "business partnership," which is working marvels.

The advantages of this over other pumps is its great strength and durability, the ease with which all the valves and plungers are seen by merely one opening of the pump, and this without disturbing the supply or discharge pipes. We have read a letter from Col. Hammond, of the C. B. & Q. R.R., in which he states that one has supplied their daily train at Galena Junction for two years, with *not one cent's repairs*, not a single bolt having been loosened to examine it, the while it has been doing full work.

Sup't Tracy, of C. & R. I. R. R., says, after this Company had supplied Blue Island water station by hand pumping for years, he introduced a steam engine, which was a great saving of yearly expense at this water station. Last Spring he substituted one of Halladay's Wind Mills and Curtis Pump, since which the Wind Mill has fully supplied all their daily trains, proving wind power the cheapest method yet introduced for railway pumping.

It is accounted by fair experiment that the Galena Company can make a saving of \$500 per month by a general introduction of the mill on their line of road. On this basis no railroad company can afford to go without this valuable invention, which a fair trial proves will pay the whole expense of the mill every year in labor saved.

The mill and pump are not only of value to the railroads, but to the general business and farming community throughout the country. On high and dry prairie farms one of these Halladay Mills and Curtis pumps is a perpetual and ever flowing spring. The farmers who have them in use are loud in their praises. One in Lee county states that his mill added \$500 to the value of his farm from the first day its blades were in motion. The same power for pumping may manifestly be widely useful for other purposes, as a grist mill, and working in wood and metals in multiform departments of industry.

In these latter uses the Halladay principle of a perfect self-regulator is retained, with a modification which answers the same purpose as the water regulator in pumping, or the ball governor in the steam engine. This is gained in the attachment of iron sliding weights on rods parallel to the sail, which by their centrifugal force at a high speed turn the sails edgewise to the wind, the most, simple, beautiful and perfect of contrivances, the crowning feature in wind machinery.

These Halladay Mills and Curtis Pumps are now being manufactured by the U. S. Wind Engine and Pump Co., of Chicago, business office No. 93 South Sangamon street. Post Office address, No. 2565.