



WATER WHEEL WITH INTERNAL ADMISSION.

to 3 horse-power ; for a machine of 5 horse-power the price is 3,500 fr., including the foundation-plate and the water-pump. The expense of mounting is small.

The following advantages are alleged :—

1. Absence of all danger through ignorance or malice
2. Inutility of legal authorisation for fitting up.
3. Instantaneous starting and stoppage.
4. Little noise ; very limited occupation of room.
5. Slight expense.

A Woodsrock man named Codville has invented a seed-sowing machine, which, it is claimed, will deposit the finest grass seed or the coarsest grain at the rate of 150 per bushels day with perfect regularity.

STRAUB'S WATER-WHEELS AT THE VIENNA EXHIBITION.

Before describing these exhibits we may state briefly the leading principles by which the design of water wheels should be governed. Whether the water acts chiefly by its weight or by its impulse, it is always necessary in order to reduce as much as possible the loss of effect, that the jet of water when first coming into contact with the buckets should not strike against but glide along them. Realising this condition, and considering that the resultant of the velocity of the jet of water and of the negative surface velocity of the wheel should be parallel to the tangent of the bucket-curve, it is obvious that this tangent must occupy a position within certain limits, as the surface velocity is given. After the water has been thus delivered to the wheel with the smallest possible loss of