ORDINARY IRON HIGHWAY-BRIDGES.

meet to determine upon who shall have the bridge. In some cases, after the bids are opened, the contract is immediately let, without discussion, to the lowest bidder. At other lettings, each company's representative is allowed to hold forth, in turn, before the assembly, and show in what way his bridge is superior to the rest.

Some of the arguments advanced are really amusing. One will say "Mine is the best bridge, for it has the most iron in the chords" (ignoring the fact that his bridge has a less depth of truss than any of the others). Another says, "My bridge is the best, because it has the most panels; and it is an acknowledged fact, that, the greater the number of panels, the stronger the bridge." Another will point to the size of his floor beams, forgetting that his bridge has one less panel than have any of the others. With such nonsense are the minds of the poor commissioners crammed, until they do not know the difference between a counter and a batter brace (in fact, it is more than probable that they never did know); and the result is, either that the letting is broken up, or that the contract is let to the one who has done the most talking, and has impressed the most falsehoods upon the understandings of the honest farmers.

Sometimes the commissioners conclude to have the letting done in style, so engage the services of an engineer. Their acquaintance with the members of the engineering profession being rather limited, they employ to decide for them the county surveyor, whose technical knowledge is confined to the use of the compass and transit, and whose mathematical education never went much farther than arithmetic. Or perhaps they will find some one much looked up to in the county as an engineer, who has been plucked at some technical school, and returned home to enjoy the honors of having been a college-man.

As Professor Vose, not long ago, stated in a very able article published in the "Journal of the Association of Engineering Societies" and "Van Nostrand's Magazine," in order to insure the building of none but good bridges, there must be a State inspector, whose duty it would be to pass judgment on the plans of all bridges, before permitting them to be erected in the State. Such an inspector should be, not an ordinary engi-