ders, of the same kind as those first used in the erection of a Bridge on this plan.

Fourth. Every angular lever is not only surrounded on three sides from the top to the bottom by the adjoining levers, as before noticed, but is also belted on the fourth or outside by the iron chain-bands or chain-plates; by which means each log is so secured, that it has not room to crush, or break. But the relation of this grand and important fact will no doubt make many of our half-taught theorists stare, who profess to know a great deal about the strength of timber.

PROP. 15.

The upper deck of this Bridge, on all occasions, furnishes a vast longitudinal brace and tie, by being cogged down on the beams, as before mentioned; and is a mean of strength abundantly suited to an arm on this plan of extra extent.

SCHOLIUM.

The decks or floors of this Bridge are always to be laid longitudinally, and caulked with oakum in the joints or seams, and afterwards payed over with pitch and chalk; by which means, if faithfully executed, not only a vast strength and firmness is added to the Bridge, whereby it is made capable of withstanding the pressure of wind and tempest, but also a grand preservation of the under part of the structure is secured without the extra and needless expense of a shingled roof.