

properties or qualities possessed by these alloys it really seems as if any conceivable demand could be met and satisfied.

"Of the richer alloys I do not intend to speak at any length, but would just remark that in the immense field covered by what are termed the "Metal Trades," innumerable applications will be found for which they are suitable. Some specimens of these applications are before you.

"Of the 25 per cent. nickel steel I would remark that with its peculiar properties of high b. s., great ductility, and *comparatively* low e. l., it is extremely well adapted for all operations involving considerable deformation—for instance, for deep stamping and flanging—whilst its non-corrodibility will render it invaluable for a great number of purposes.

"This quality of non-corrodibility, considered together with its strength both elastic and ultimate when unannealed, will render it specially useful in all cases where the cost of metal is of minor importance when contrasted with the cost of labour to be expended upon it, or its use for special purposes: illustrations of these may be found in all small and special type boilers, in locomotive and other fire-boxes, and in the hulls of torpedo and other similar vessels where lightness and strength with non-corrodibility are of vital importance.

"In the region between 25 per cent. and say 5 per cent. nickel we have an abundance of possibilities as yet comparatively unknown, in which I expect will be found