

# Holtzapffel Documents

## Correspondence

ENGLISH MECHANIC AND WORLD OF SCIENCE: No, 881, MARCH 3, 1882 (p. 612)

[19768.]—In the reply to my letter, No. 19731, the main question is ably left on one side, and is in no respect touched by the new reading your correspondent would now give as his meaning of private property. I am sorry that it is not possible either to modify the observations made upon his statement, No. 19675, or to omit saying that I have received more than one assurance that they were not uncalled for.

One word more on the subject. Mr. Evans is again unfortunate in his application of a part of a sentence; there has been no insinuation that he has acquired these particular tools by unfair means, and if he had thought there had been, it is remarkable that he should confine himself to so mild a word as "ungenerous." There are surely other and mechanical interpretations to my remark; but I should be sorry to attempt to instruct Mr. Evans after his repudiation of my capacity.

Dr. Edmunds will forgive my descrying some faint resemblance he bears to the hydra, inasmuch as the disposal of one question is the sure prelude to more, and he will readily pardon my inability to give him other than short replies, and indeed, I fear I must sometimes forego even that pleasure. The dimensions, page 566, are the outside measures, i.e., taken at the top of the thread, and being as already stated, only those for fixing screws. They do not include the dimensions of the mandrel, which, taken in the same manner, are usually 5in. .8125, and 6in. .9375; but these measures as Dr. Edmunds points out, sometimes suffer interference. He is also correct in supposing that a cast-iron chuck may be bored a little larger than one of brass or gunmetal, but this difference is not usually a matter for exact definition, and it is to some extent modified by the quality of the iron, skill, and individual practice. I have little doubt, from the particulars given by Dr. Edmunds, that the damage to the nose of the mandrel to which he has referred, arose either from the screw in the cast-iron chuck being taper, see Fig. 536, in the chapter on screw-cutting, Vol. IV., or from some malformation in its thread towards the bottom of the internal screws, and still more from the exhibition of too great force, the gravity of which error, I trust I may be pardoned for saying, is perhaps insufficiently estimated by the average amateur. I embrace this opportunity for saying that for such mandrels as are in question cast-iron chucks have no other merit than that of cheapness; but the difference in cost between them and those of gunmetal or brass is, after all, but insignificant, and for many reasons the latter materials are usually preferable.

I may now ask permission to express my sincere thanks to your, and to me unknown, correspondent, "Ivory," for his kind and most encouraging letter, No. 19756. I believe that he will find the class of information he asks for in the forthcoming volume, to the advance of which I must at present continue to devote every otherwise unoccupied moment.

John J. Holtzapffel

64, Charing-cross, S.W., Feb. 27.