

## The Clothyard

By ROBERT P. ELMER

"He (Sir Hewe the Mongon-byrry)  
rod uppon a corsiare  
Throughe a hondrith archery:  
He never styntyde nar never blane  
Till he cam to the good lord  
Perse. (Percy)  
He set uppone the lord Perse  
A dynte that was full soare:  
With a suar spear of a myghte tre  
Clean thow the body he the  
Perse bore.  
Athe tothar syde that a man myghte  
se  
A large cloth yard and mare:  
Towe bettar saptayns wear nat in  
Christiante  
Then that day slain wear ther.  
An archar off Northomberlonde  
Say slean was the lord Perse:  
He bar a bende-bow in his hande  
Was made off trusti tre.  
An arrow that a clothe yard was  
lang  
To the hard stele haylde he:  
A dynt that was both sad and sore  
He sat on Sir Hewe the Mongon-  
byrry.  
The dynt yt was both sad and sar  
That he of Mongon-byrry sete:  
The swane fethars that his arrowe  
bar  
With his hart blood the wear  
wete."

"The Ancient Ballad of Chevy Chase." Probably a 15th century rendering; from Percy's "Reliques of Ancient Poetry."

"That fellow handles his bow, like a Crow-keeper: draw mee a Cloathiers yard." Copied from an original Shakesperean folio (1623) in the treasure room of Haverford College Library. "King Lear."

Every archer has read of the clothyard shaft of the medieval English armies. The word occurs here and there in the older literature but the two quotations which are fully rendered above are probably the best examples of its use and certainly are the ones most often cited. They are the sources for modern writers.

Since the reader inevitably wonders if the clothyard were of a different length from our ordinary yard, let him now be assured that it was longer by an inch; being the equivalent of 37 of our standard inches.

Most unfortunately for us Americans, Dr. Saxton Pope assumed, for no other reason than what was later found to be a mere guess, that the clothyard shaft was none other than our familiar twenty-eight inch arrow. He jumped to this conclusion from the fact that in the old writings the word clothyard was used interchangeably with "ell", and so, as one of the several ells used in Flanders—where the cloth-weavers came from—was 27 inches long, he accepted it as the clothyard, thus making a 27 inch shaft which became a 28 inch arrow when the head was added. There was enough plausibility in that hypothesis to give it consid-

erable vitality, even though it was undoubtedly wrong.

I do not remember whether Dr. Pope told this to me when we first met in Wayne in 1915 or whether he wrote it from California, but as it appeared in 1917 in my book "American Archery", which no one seems to know about, he must have formed the opinion very early in his career as an archer. The definition in that glossary is: "Cloth yard. A measure of probably 27 inches." And as late as 1925 when I wrote the first edition of "Archery", I still knew no better, as the definition there is: "Cloth-yard. A measure of 27 inches probably introduced into England by Flemish weavers."

Whether subsequent writers copied my words or others by Pope I do not know, but here are the quotes: "Modern Archery", 1929, by Arthur Lambert—"The English yeoman developed the use of a long arrow. It was supposed to be a 'clothier's yard' in length. This, authorities contend, was about twenty-seven inches." "The New Archery", 1939, by Paul Gordon—"Cloth yard. The statutory length of the English war arrow, 27½ or 28 inches." "Handbook of Archery Terms", 1936, J. W. Canfield—"Clothier's yard. First defined as a measure of 27 or 28 inches. Dr. Elmer in his 1933 list of terms defines it as a 37 inch measure. Hansard give 'two cubits (36 inches).'"

Canfield's statement about me is true. When I saw in the A. B. R., that he was composing such a book, I wrote to him suggesting that the usual 27 or 28 inch definition was incorrect, as I was sure that I had found the right answer during the interval between the first and second editions of my "Archery". He then added the mention of my 1933 "list of terms" but apparently remained unconvinced, as he continued to define Clothyard shaft as: "An English term used to indicate the length of an arrow, probably about 27 or 28 inches."

One discrepancy in values always stuck in my mind, and I think, had a lot to do with the instigation of a more careful search, and that was the obvious respect in which a draw as long as a clothyard was held. It invariably, as in our three citations, indicated an extraordinary length which deserved special recognition. In an age when the usual arrows seem to have measured from 30 to 34 inches, a 28 inch shaft would have seemed puny and deserving more of contempt than of praise. Here let it be noted that

the first allusion to the clothyard in "Chevy Chase" was to the measurement only and not to an arrow, as it indicated the distance to which the spear of Sir Hugh Montgomery stuck out of the back of Lord Percy.

Now why should we accept 37 inches as the correct length? Primarily because it is definitely recorded as such in the scholarly article on Weights and Measures that appears in the "Encyclopedia Britannica". The most obdurate skeptic ought to be convinced by the following two quotations:

"English weights and measures abolished. The yard and inch, or 37 in. ell (cloth measure) abolished after 1553; known later as the Scotch ell = 3706."

"Rhineland foot, much used in Germany—12.357 in.—the foot of the Scotch or the English cloth ell of 37.06 in., or 3 x 12.353." The little difference of .357 and .353 in the fractions of the inch are accurately copied. Why they appear I don't know.

Next we should consider why "cloth" is so persistently stressed in the word. In the reign of Edward I—1272 to 1307—and for at least a century after, vast numbers of clothiers were imported from Flanders to improve the textile industries of England. In those days the word "clothier" meant a maker of any kind of cloth, be it of wool, linen or silk. It did not mean the maker of clothes, who was called a tailor—literally meaning a cutter—as is still the correct usage. Those immigrants naturally brought with them their own looms, which were constructed by the Rhineland foot of their homeland—measuring approximately 12 1/3 English inches—and just as naturally they measured the length of their product by the same modulus. As the standard English yard of 36 inches, and in fact other yards, were also in use, the 37 inch one distinctively became known all over England as the clothier's yard, or clothyard.

Here a very human factor came into play, exactly as it does today: the jealousy of native workmen toward foreigners who can do a better job. Such bitter animosity arose against the skillful Flemings who were taking the bread out of the mouths of English workmen that they were subjected to violently brutal attacks by indignant mobs. So intolerable became their existence in the large cities that at first it was found necessary to scatter them far and wide in such corners of the country as the south

of Wales, Norwich on the east coast, and Keswick in the mountainous northwest. We can easily perceive how knowledge of the clothyard of those industrious Flemings would be widespread.

Measurements may have arisen in primitive times by comparison with parts or acts of the human body, as the finger-breadth, foot, arm-stretch (fathom), span and pace. Many rough approximations persist today, just as we archers use the fistmele, which varies with each person. Others, like the hand in horse measure, have become standardized in inches. Actually, however, the ancient systems of mensuration that have accompanied civilization—whether in Mesopotamia, Egypt, Greece, Central America, China, or where you will—have been developed with astounding fitness by scientific methods. So, when Henry the Eighth said that henceforth there should be no other yard in England than the length of his arm—a popular story which is open to grave doubt—it probably was accidental that his arm equalled the standard, and most used, English yard of 36 inches, rather than that such a yard was then created to fit the royal person. At any rate, in 1553, he abolished the clothyard as we have seen above.

Yet a change of law does not necessarily change a custom, and so firmly had the British people come to expect to receive thirty-seven inches in a yard of cloth, that in the reign of Edward 6th, son of Henry 8th, another law was passed which, while it did not acknowledge the clothyard in fact, did acknowledge it in spirit by requiring that when any yard of cloth was sold the draper must place his thumb at the far end of the yardstick and cut on the off side. Indeed, this practice is said to still be found occasionally where one would naturally expect it to persist: in Scotland.

How did the Rhineland, or Rhenish, foot originate? One of the most important and widely dispersed cubits of antiquity—for there were many—was of 20.55 inches, with variations of a few hundredths of an inch in different localities. By taking three-fifths of this modulus for convenience, as was often done in such cases, a length of 12.33 inches was obtained. This is what we call the Rhenish foot, though it was by no means limited in use to the area of the Rhine. Presumably this

measure—for the cubit was a southern standard chiefly of the countries at the eastern end of the Mediterranean sea—came northward through the regular avenues of trade, just as did the Arabic system of weights which we denominate as Troy, deriving the name from the international market of Troyes in France.

Modern archers who use the common finger-lock and draw to the chin may wonder how anyone but a giant could handle a thirty-seven inch shaft. The explanation is found in the illustrations of ancient manuscripts, as well as in the method prescribed by Roger Ascham where he says in "Toxophilus"—1544—that no man draweth but to the ear or the breast. It is my opinion that the technique of the draw in ancient English archery consisted in forming the lock by wrapping the first two fingers about the string and the large, bulbous nock-end of the arrow—so that the string lay in the crease between the proximal and second phalanges—closing the fist tight, and then drawing it to the ear on a level with the eye. Anyone who tries this for the first time will be amazed at the increase in his length of draw, making a thirty-four inch arrow quite easy for a man of moderate reach and thirty-seven possible to a great many whose arms are but slightly longer. It is most interesting to note that in 1928 Mr. Kenneth Hair of New Jersey, while on a visit to his native Scotland, found a Highlander who owned a bow well over six feet in length—probably six foot, three inch—which resembled in all respects the ancient English longbow, and in which he shot a very long arrow—probably thirty to thirty-four inches—by this identical style.

After all, the Japanese and Chinese of the present day shoot arrows as long as the clothyard, and the Arabs, according to "Arab Archery" on some occasions used arrows as least as long and, moreover, drew them clear to the head. The arrows of South American Indians may be five feet or more, but they are not drawn very far.

And, by the way that word "bende-bow" in "Chevy Chase" did not mean a bow that would bend, nor one that was bent for bracing. The word "bende" meant something long and narrow, like our word band, and here it signified a longbow rather than a crossbow.