

## What Is a τρυκινον? A Fresh Look at *P.Oxy.* XIV 1674

Plate XII

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**Abstract:** This article presents a new transcription of the word τρυκινον in *P.Oxy.* XIV 1674.5 based on a recent autopsy, a word which Grenfell and Hunt left untranslated in their edition due to its being unattested in the Greek language. The word is most likely a misspelling of a common Greek word meaning “fire drill”, and would thus fit well within the agricultural context of the letter. An image of *P.Oxy.* XIV 1674 is published here for the first time.

**Keywords:** *Oxyrhynchus*, fire drill, trypanon

In *P.Oxy.* XIV 1674<sup>1</sup> (third century AD), Theon writes to his son Apollonius with instructions to cut down an acacia and to throw its wood into, what Grenfell and Hunt read, the τρυκινον (l. 5 ). Of this word, the distinguished editors remark: “the third and fourth letters have been corrected, and the result looks like τρυκινον or τραπινον, but neither of these is a known word. The preceding article may be τό, not τόν”<sup>2</sup>. As a result of their uncertainty, the editors chose not to translate τρυκινον.

K.F.W. Schmidt’s correction proposal to read τὸ | γρυτινόν (*BL* I 467) is highly problematic for two reasons. First, the initial τ is clearly legible in the papyrus, and so Schmidt’s attempt to read γ is without justification. Second, the term is linguistically derived from γρύτη, which signifies a “woman’s dressing case,” or a workman’s “tool bag” (*LSJ* 361b). It is used in the latter sense in *P.Petr.* II 32 (Ir, l. 27) (= σκευῶν γρύτην). However, given that 1) neither of these definitions fits the agricultural context of *P.Oxy.* XIV 1674 and that 2) the corrected reading cannot be verified on the original papyrus, Schmidt’s proposal must be rejected.

It is clear from the papyrus, as Grenfell and Hunt assert, that the third letter has been corrected. It appears that α was written initially but was corrected by superimposing υ onto it; the ink of the υ is bolder and stands out slightly. The general impression, then, is that the third letter is υ, and so the first three letters (τρυ) as

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<sup>1</sup> I would like to thank Dr. Richard Virr, Head Curator of Manuscripts at McGill University, for his generous support of my autopsies of the Coptic and Greek manuscripts at McGill and for his permission to publish an image of *P.Oxy.* XIV 1674 here. I also am grateful for the comments of K.A. Worp.

<sup>2</sup> Ed. princ. Grenfell and Hunt, “Letter of Theon to his Son Apollonius,” *P.Oxy.* XIV 1674 (1920) 132–33.

they stand in the *editio princeps* are correct. As for the fourth letter, Grenfell and Hunt list as an option either  $\epsilon$  or  $\pi$ . While  $\epsilon$  is at least possible, this seems unlikely to me, since there is clearly a horizontal stroke that is consistent with the horizontal stroke of the  $\pi$ . Furthermore, the right vertical hasta of the  $\pi$  in this papyrus tends to resemble a  $\epsilon$ , since the right tip of the cross stroke curves downward and the second vertical stroke curves inward and tails off to the right at the bottom, thus giving it a lunate shape. It is possible that the fourth letter was corrected to  $\epsilon$  by merely accentuating the already similar form of the  $\pi$  as it stood in the papyrus, but since the letter is graphically consistent with the  $\pi$  of this papyrus it need not be deemed a correction. Grenfell and Hunt do state in their notes section that the fourth letter might be  $\pi$ , but that they prefer  $\epsilon$  is evidenced by their transcription. However, in my careful judgment the fourth letter is  $\pi$  and not  $\epsilon$ . Therefore, based on my examination and the foregoing analysis, the word in question should read  $\tau\rho\upsilon\pi\iota\nu\omicron\nu$ . While I agree entirely with E.G. Turner's statement that the transcriptions of Grenfell and Hunt "will be corrected at the critic's peril," it must be observed that my proposed transcription is only a slight variation of the possibilities given by Grenfell and Hunt themselves<sup>3</sup>.

Yet, even though we have transcribed differently than Grenfell and Hunt, there is still a question of what  $\tau\rho\upsilon\pi\iota\nu\omicron\nu$  means in this context; it is not a known word. I propose that the  $\iota$  in the word is a misspelling of  $\alpha$  and that the word intended is  $\tau\acute{o}$   $\tau\rho\acute{\upsilon}\pi\alpha\nu\omicron\nu$ , a known Greek word<sup>4</sup>. If this is the case, then an additional correction must be made to the transcription: the preceding article should in fact be  $\tau\acute{o}$  and not  $\tau\acute{o}\nu$ . It is not surprising that Grenfell and Hunt assert that "[t]he preceding article may be  $\tau\acute{o}$ , not  $\tau\acute{o}\nu$ ". After examining the papyrus letter, I can confirm that  $\nu$  is not present in the papyrus at the end of line 4. As the image published here demonstrates, there is a small lacuna in the place where we would expect  $\nu$ , but it is small enough that we would see portions of the letter if it were written. Accordingly, the preceding article should now be read as  $\tau\acute{o}$ .<sup>5</sup>

The most common meaning of the word  $\tau\rho\acute{\upsilon}\pi\alpha\nu\omicron\nu$  is "a borer, a carpenter's tool" (*LSJ* 1830b) used to drill holes in wood generally (e.g., Homer, *Ody.* 9.385; Euripides, *Cyc.* 461). Hippocrates and Galen both refer to it (*VC* 18 and 19.129, respectively) as a surgical instrument (trepan), but this rare usage is limited to such medical contexts.  $\tau\rho\acute{\upsilon}\pi\alpha\nu\omicron\nu$  also means "fire drill," a special tool that was rotated by a thong to bore small, easily combustible sticks – or "fire sticks" ( $\pi\upsilon\rho\epsilon\acute{\iota}\alpha$ ) – for the purpose of kindling a flame. The firesticks are alluded to in Sophocles'

<sup>3</sup> E.G. Turner, *Greek Papyri: An Introduction* (Oxford: Clarendon, 1980) 72.

<sup>4</sup> In his important work on the grammar of the papyri, F.T. Gignac (*A Grammar of the Greek Papyri of the Roman and Byzantine Periods*, 2 vols. [Milano: Istituto editoriale Cisalpino – La Goliardica, 1976, 1981]) gives no examples of  $\iota$  used for  $\alpha$  in the papyri. In a recent e-mail (25 April 2012), however, Prof. Gignac indicated that he accepts my proposal that  $\tau\rho\upsilon\pi\iota\nu\omicron\nu$  is being used for  $\tau\rho\upsilon\pi\alpha\nu\omicron\nu$  in *P.Oxy.* XIV 1674. In his opinion, the spelling error should not be characterized as new evidence of  $\iota$  written for  $\alpha$ ; rather, he prefers to call it merely "a mistake".

<sup>5</sup> Schmidt, then, was correct in reading  $\tau\acute{o}$ , though his other corrections, as I have suggested, are dubious.

*Philoctetes* (26): “Just a bowl of bare wood, the work of a sorry craftsmen, and with it fire sticks” (αὐτόξυλόν γ’ ἔκπωμα, φλαουρουγοῦ τινος τεχνήματ’ ἀνδρός, καὶ πυρεῖ ὁμοῦ τάδε). In this account, Neoptolemus describes what is presumably a larger piece of wood (αὐτόξυλον) that would have been kindled using the smaller fire sticks (πυρεῖ). The ἐσχάρα, a fireplace or hearth (mentioned in the lists of goods in P.Cair. Zen. I 59013 and P.Cair. Zen. IV 59692), would have been a typical third component involved in the process of lighting a fire (*Ody.* 5.59; 7.169). It is often used more generally to refer to an altar holding a burnt sacrifice (Aeschylus, *Pers.* 205; *Eu.* 108). The most detailed description from the ancient world of the anatomy of the τρύπανον, πυρεῖον and ἐσχάρα is recorded by Theophrastus (*HP* 5.9.7; see appendix).

Based on the context of *P.Oxy.* XIV 1674, especially in light of the reference to throwing the wood (ῥύλη) of the acacia into the object in question, τρύπανον may be a synonym for πυρεῖον, which, although more commonly meaning “fire sticks,” can denote “earthen pan for coals” (*LSJ* 1556b) – a vessel in which something is burned. The use of πυρεῖον as an earthen pan or fire pan is fairly common. For example, in the Septuagint, Nadab and Abioud each take a fire pan (πυρεῖον) and place fire upon it (Lev 10.1 LXX). As late as the fifth century AD, Theodoret of Cyrus refers to “putting coals into the fire pan” (εἰς τὸ πυρεῖον τοὺς ἄνθρακας λαβεῖν) (*Quaestionis in octateuchum* 176.6).

It is more likely, however, that the instructions were to place the wood (possibly brushwood) onto the hallowed wooden base of the τρύπανον or perhaps into the ἐσχάρα itself. R.J. Forbes describes the τρύπανον and how it was used in the classical world and it is worth quoting him here at length:

There were two distinct operations: the first was the preparation of a smouldering spark or ember; the second the transformation of this ember into a flame with the help of tinder. The essential features of all fire drills is that one piece of wood, cylindrical or flattened in form, which is spoken of as the base or hearth, is held horizontally on the ground whilst another piece, always circular (about 1/4 – 5/8” in diameter) and some 14–30 inches long, often called the drill stick, is twirled rapidly with its lower end pressed into a shallow pit or depression made in the [sic] hearth ... The fire stick, called trypanon [τρύπανον] or tertron, is a piece of fairly hard wood. It is introduced into a hole in the base or hearth, called eschara [ἐσχάρα] and then rotated quickly either by hand or by means of a cord wound once or twice around it. The other end of the trypanon is pushed on to the base by the operator.<sup>6</sup>

Based on this description, it would make sense why Apollonius was instructed to place the wood into (or possibly upon) the τρύπανον, since the tool had a base and can be seen as an extension of the drill itself. Although it is far from certain, it is at least possible that some fire drills were secured onto the base of the ἐσχάρα and that the whole system was sometimes referred to as the τρύπανον; this is per-

<sup>6</sup> R.J. Forbes, *Ancient Technology*, vol. 6 (2<sup>nd</sup> ed.; Leiden: Brill, 1966) 9–10.

haps supported by Theophrastus' reference to the active and passive parts of the apparatus (see appendix). If so, *P.Oxy.* XIV 1674 would be our only example of this usage, which is remarkable seeing that τρύπανον is a rather uncommon word in literary texts (only 170 instances) and occurs only here among the documentary papyri.<sup>7</sup> How it is to be understood in this context has been suggested, but these suggestions are tentative and await verification from future study. What is clear is that the word in question is τρύπανον which is in all probability a misspelling of τρύπανον; this identification helps to explain the one obscurity in this papyrus which surely piqued the curiosity of Grenfell and Hunt.

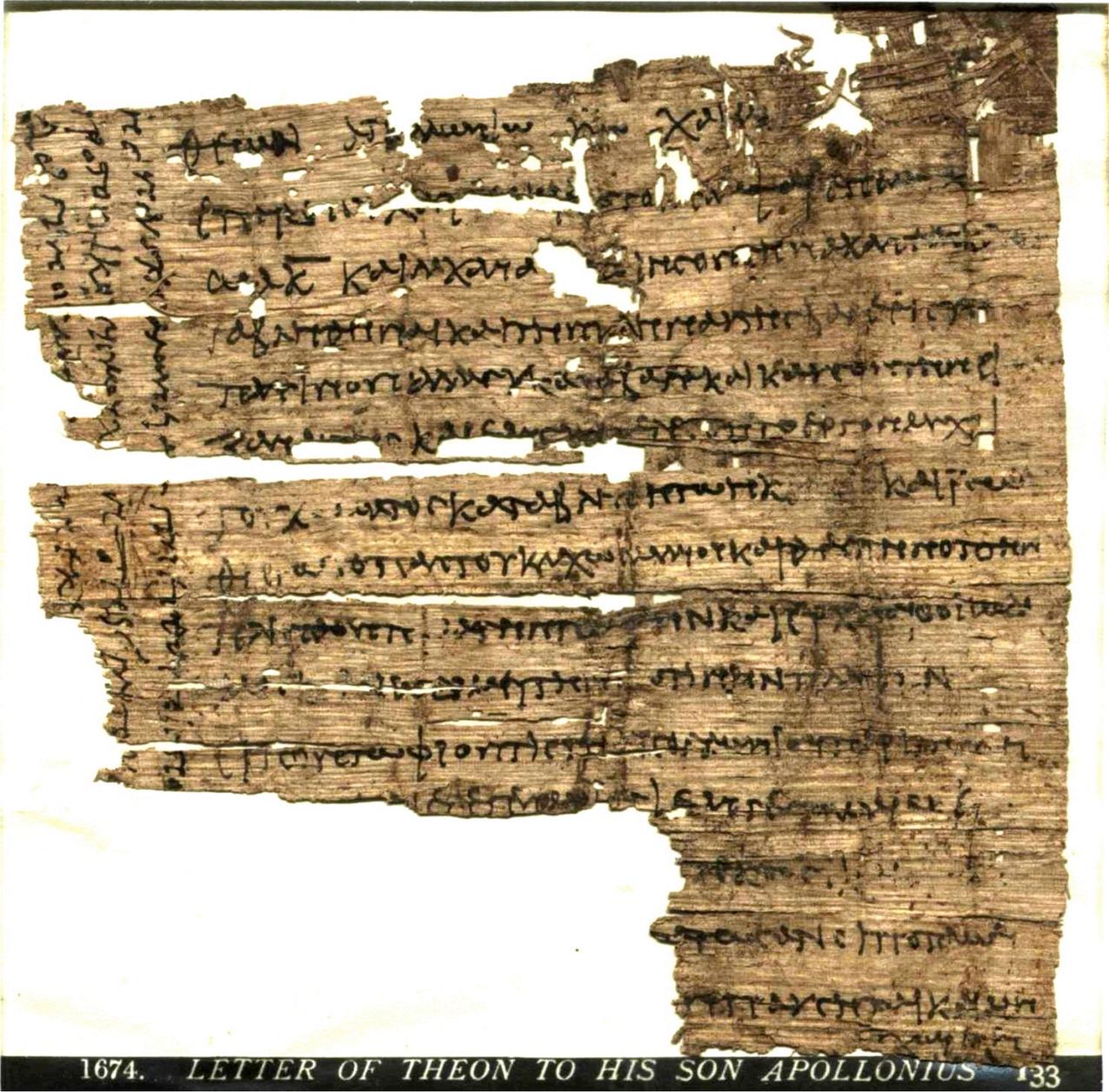
### Appendix

Fire sticks [πυρεῖα] are made of many kinds of wood, but best, according to Menestor, from ivy: for they flare up most quickly and freely. They say also that a very good fire stick [πυρεῖον] is made of the wood which some call traveller's joy: this is a tree like the vine or the wild vine which, like these, climbs up trees. The hearth [ἔγχάραν] should be made of one of these, the fire drill [τρύπανον] of bay; for the active and passive parts of the apparatus should not be of the same wood, but different in their natural properties to start with, one being of active, the other of passive character. Nevertheless they are sometimes made of the same wood, and some suppose that it makes no difference. They are made in fact of buckthorn, kermes oak, lime and almost any wood except olive; which seems rather surprising, as olive wood is rather hard and oily; however, it is plainly its moisture which makes it less suitable for kindling. The wood of the buckthorn is also good, and it makes a satisfactory hearth [ἔγχάραν]; for, besides being dry and free from sap it is necessary that this should also be of rather open texture, that the friction may be effectual; while the drill [τρύπανον] should be one which gets little worn by use, it is effective through its biting quality. All fire sticks [πυρεῖα] take fire quickly and better in a north than in a south wind, and better in an exposed spot than in one which is shut in.<sup>8</sup>

Theophrastus, *HP* 5.9.7

<sup>7</sup> Calculations based on searches in the *TLG* and the Papyrological Navigator at <http://www.papyri.info> (both accessed 23 April 2012).

<sup>8</sup> Trans., slightly modified, from Forbes, *Ancient Technology*, 11.



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