

This month's Daf Digest is dedicated
L'iluy Nishmas Mrs. Yenta Weiss, Rivke Yenta bas Asher Anshel & Yosef ben Chaim HaCohen Weiss
By Mr. and Mrs. Manny Weiss
L'iluy Nishmas שרגא פייוול דוד בן קמואל
By the Abramowitz family

OVERVIEW of the Daf

1) Clarifying the Mishnah

The Gemara explains why the korah has to be the width of a tefach rather than a tefach and a half.

Rabbah bar R' Huna and R' Chisda agree that the beam must be strong enough to support a half-brick. They disagree whether the pegs used to support the korah must be strong enough to support the korah and a half-brick.

2) Korah issues

R' Sheishes rules: If one places a korah over the entrance-way to a mavoi and then drapes a reed mat over it that hangs three tefachim above the ground, carrying is not permitted. The reason is that the mat doesn't qualify as a wall and the korah is covered.

A Baraisa records a dispute regarding a gap in the korah. According to Tanna Kamma, if the gap is less than three tefachim it is still valid, whereas according to R' Shimon ben Gamliel the gap can be as wide as four tefachim and still be valid.

The Baraisa continues: If two thin korahs are used they must together have a thickness of a tefach. R' Shimon ben Gamliel rules that if, when spread apart, the two thin korahs can support a three-tefach brick it is also valid.

R' Yosi the son of R' Yehudah rules that if the two thin korahs are at separate heights it is still valid as long as neither one is positioned outside of the acceptable range.

Abaye explains the rationale behind the ruling of R' Yosi the son of R' Yehudah.

R' Yehudah taught the Mishnah to Rav's son according to our version of the Mishnah, i.e. according to R' Yehudah if the korah is wide it need not be strong. Rav, however maintained that even according to R' Yehudah the korah must be strong unless it is four tefachim wide.

3) Clarifying the Mishnah

The Gemara explains the novelty of R' Yehudah's second ruling that allows us to look at a korah made of straw as if it was made of metal.

The Gemara explains the novelty of R' Yehudah's next ruling that allows us to look at a bent korah as if it was straight.

The purpose of the last example that a round korah that looked as if it were square is to allow the Mishnah to explain that a circle with a circumference of three has a diameter of one. A source for this fact is presented.

4) Shlomo's pool

R' Chiya states in a Baraisa that the pool built by Shlomo

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Distinctive INSIGHT

Gemara geometry

כל שיש בהקיפו ג' טפחים יש בו רוחב טפח

Tosafos points out that the ratio of the diameter to the circumference of a circle of 3:1 is not accurate. Tosafos leaves this unresolved. Rambam, in his Commentary to the Mishnah, states that the ratio of diameter to circumference is known to be "three and a seventh plus a bit more—שלא יושג לעולם אלא בקירוב—a number which will never be precise, only approximated." [This is a clear indication that Rambam, and the Gemara, knew of pi. Even the approximation he gives of $3 \frac{1}{7}$ is less than 13 ten thousandths more than pi.]

Rambam concludes that because the ratio of pi is an irrational number, and at some point we have no choice other than to approximate, the Gemara regularly uses the round number of 3:1. This is admittedly a wider approximation than $3 \frac{1}{7}$, but the sages deliberately chose to be lenient and not burden the community with measurements of fractions.

The Rosh (in תוס' הרא"ש) wonders why the Gemara probes to find the scriptural source for the ratio of 3:1, when this is an empirical fact which can be observed by everyone who does the measurement. He answers that we know that the ratio is not exactly three to one, and that it is slightly greater. The question of the Gemara, therefore, is how do we know that we are allowed to calculate halachic guidelines based upon a number which is approximate? In other words, we are technically allowed to use a round beam to fix a mavoi even if its circumference is exactly three tefachim, as the Mishnah states. Yet, the measurement of three is actually too small to yield a diameter of a full tefach, and using this round beam will lead to having a korah-beam which is too small. How do we know, nevertheless, that we are allowed to rely upon this ratio? The Gemara answers that the halacha recognizes this approximation and considers measurements based upon it to be valid, based upon a verse found in Melachim 2.

It seems that according to the Rosh, we can rely upon this leniency not only in regard to rabbinic injunctions, but also in reference to Torah laws.

See also (#18 372) שער הציון who says that perhaps there was a tradition from Sinai to allow us to rely upon this approximation, although it is a leniency, even for Torah law. (See also Chazon Ish 138:4). ■

Today's Daf Digest is dedicated
By Mr. and Mrs. Israel Krakowski
In memory of their mother
לע"נ מרת פרומיט זלתיא בת ר' ישראל אליה

HALACHAH Highlight

Circles and Hexagons

Anytime the circumference is three tefachim

כל שיש בהיקפו ג' טפחים

Whenever the circumference is three tefachim

The Gemara relates that a circle that has a circumference of three will have a diameter of one. Based on this ratio, a koreh – crossbeam – that is three tefachim in circumference is valid since it will have a diameter of one tefach. Tosafos¹ notes that according to mathematicians this ratio is not accurate and the diameter of a circle with a circumference of three will be slightly less than one. Interestingly, Tosafos HaRosh² explains that the reason the Gemara asks “מנא הני מילי – From where do we know these words,” is specifically because the ratio is not precise. If the ratio was exactly three to one there would be no reason for the Gemara to ask for a source. The Gemara’s inquiry was for the source that indicates that even though the ratio is not precise it is still reliable in halachah.

Later authorities question the extent to which one may rely upon this ratio. Mishnah Berurah³ writes that one may certainly rely on this ratio when it comes to Rabbinic matters. Regarding Biblical matters he writes that it may be that this ratio is Halachah L’Moshe M’Sinai and may be relied upon even for Biblical matters. Chazon Ish⁴ writes definitively that this ratio is known from Halachah L’Moshe M’Sinai and may be relied upon even for Biblical matters. He explains that this ratio is included in the Gemara’s statement that measurements are Halachah L’Moshe M’Sinai.

Sefer Eretz Chaim⁵ in the name of his father suggests the following explanation. The ratio of three to one happens to be precise when measuring a hexagon. He further proposes that in the past they did not make perfect circles due to the difficulty involved in forming a perfect circle. The best they could do was to make hexagon shaped objects which are easier to form. Therefore, one could assert that when the Gemara discusses a round koreh it was referring to one that was actually hexagon shaped which contains the exact ratio of three to one. ■

(Overview...Continued from page 1)

HaMelech was large enough to contain 150 mikvaos. The Gemara explains how the stated dimensions of the pool would be large enough to contain all that water.

5) **MISHNAH:** The Mishnah discusses the height, width and thickness requirements for a valid lechi.

6) Clarifying the Mishnah

The Gemara clarifies: Although the Mishnah uses the plural of the term lechi, it was not to imply that the Mishnah follows the view of R’ Eliezer who requires

two l’chayayim to adjust a mavoi.

When the Mishnah ruled that the width of the lechi can be any amount, it meant even the width of a string of a coat.

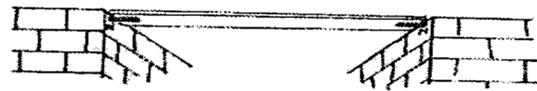
7) Lechi issues

A Baraisa ruled: If a lechi was placed in the middle of the entranceway rather than at the outer edge, it is permissible to carry up until the lechi and there is no concern that one may carry beyond the lechi.

Rava ruled: If the lechi is three

Daf DIAGRAM

מעמידי קורה אינן צריכין שיהיו בריאין כדי לקבל קורה ואריח

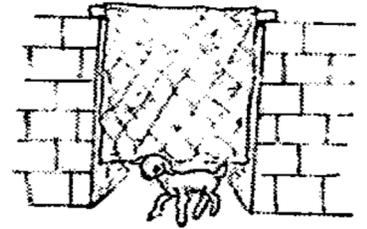


The supports of the beam only need to be

strong enough to carry the beam. They do not need to be strong enough to hold the weight of the beam together with the half-brick

הניח קורה על גבי מבוי ופרס עליה מחצלת וכו' מחיצה שהגדיים בוקעים

If a beam was set across the mavoi, and a sheet was spread across it, if the bottom of the sheet is suspended three tefachim above the ground, this is not an acceptable partition. A kid-goat can pierce his head through it. ■



REVIEW and Remember

1. What is the dispute between Tanna Kamma and R’ Shimon ben Gamliel concerning lavud?
2. Explain the principle of רואין לקבל.
3. What was the shape of the pool built by Shlomo HaMelech?
4. What are the physical characteristics of a valid lechi?

1. ד"ה והאיכא.
2. ד"ה כל.
3. שעה"צ סי' שע"ב ס"ק י"ח.
4. ארו"ח סי' קל"ח סק"ד.
5. ספר ארץ חיים (סתהון) בראש הספר. ■

tefachim above the ground or three tefachim from the side wall of the mavoi, the lechi is invalid; even according to R’ Shimon ben Gamliel who applies the principle of lavud to gaps larger than three tefachim **in this case it is invalid.**

A number of different opinions are recorded concerning whether we rule like R’ Yosi’s opinion in the Mishnah who requires a lechi to be three tefachim wide. The final ruling, based upon the practice of people, is not like R’ Yosi and a lechi may be any width. ■

