and the melted fat remains liquid till its temperature falls to 33o or 34° C. Tallow consists of a mixture of two- thirds of the solid fats palmitin and stearin, with one-third of the liquid fat olein. A fluid oil known as tallow oil is obtained from solid tallow by the separation by pressure of the greater part of the olein. To facilitate the separation of the olein, tallow is first melted and just before resolidi­fying it is mixed with about 10 per cent. of benzene or petroleum spirit. The mixture is then allowed to solidify in flat cakes or slabs, which are placed in press bags and piled between iron plates in a hydraulic press. On the application of pressure the olein mixed with the solvent hydrocarbon flows freely out, leaving a hard dense cake of stearin and palmitin in the bags. The volatile solvents are subsequently driven off by blowing steam through the oil, which remains a turbid fatty fluid from the proportion of solid fats it carries over with it from the hydraulic press. Tallow oil is a useful lubricant and a valuable material for fine soap making, but it is not now abundantly prepared. Mutton tallow differs in several respects from that obtained from oxen. It is whiter in colour and harder, and contains only about 30 per cent. of olein. Newly rendered it has little taste or smell, but on exposure it quickly acquires characteristic qualities and becomes rancid. Sweet mutton tallow melts at 46° and solidifies at 36o C.; when old it does not melt under 49°, and be­comes solid on reaching 440 or 450 C. It is sparingly soluble in cold ether and in boiling spirit of 0∙822 sp. gr.

In early times tallow was a most important candle-making substance, and candles made from this material are still consumed in no inconsiderable quantity, but the greater proportion of the supply is now absorbed by the soap trade; the artificial butter trade which has sprung up since 1872 also takes up large quantities of sweet tallow. Tallow is further used extensively as a lubricant and in leather dressing, &c. It is of course a product of all cattle aud sheep-rearing countries, and it forms an important article of export from the United States, the Argentine Republic, and the Australian colonies. Till within the last quarter of a century Russia supplied nearly all the tallow imported into the United Kingdom; but now the imports from that source are on the most meagre scale, although Russian P. Y. C. (pale yellow candle) con­tinues to represent the finest commercial brand.

TALLOWS, Vegetable. See Oils, vol. xvii. p. 746.

TALMA, Joseph François (1763-1826), French tragedian, was born at Paris 15th January 1763. After attending the Mazarin college, he accompanied his father, who was a dentist, to London, where he studied in the hospitals. While in London he took part in some amateur theatricals, and, his talents at once attracting notice, a pro­fessional engagement was offered him. To this, however, his father would not consent, and shortly afterwards he was sent to Paris, where for some years he was assistant to a dentist. His predilection for the drama could not be restrained, and on 21st November 1787 he made his début at the Comédie Française in *Mahomet.* His efforts from the first won appreciation, but for a considerable time he was restricted to secondary parts. It was in *jeune premier* parts that he first came prominently into notice, and he attained only gradually to his unrivalled position as the exponent of strong and concentrated passion. In 1791 he and other dissentients founded the Théâtre Français de la rue de Richelieu,—a name changed in 1792 to Théâtre de la République, where he won his most striking successes. Talma was among the earliest advocates of realism in scenery and costume, being greatly aided in his reforms by his friend the painter David. He possessed in perfection the physical gifts fitting him to excel in the highest tragic parts, an admirably proportioned figure, a striking counten­ance, and a voice of great beauty and power, which, after he had conquered a certain thickness of utterance, enabled him to acquire a matchless elocution. At first somewhat stilted and monotonous in his manner, he gradually emancipated himself from all artificial trammels, and became by perfection of art a model of simplicity. Talma enjoyed the intimacy of Napoleon, with whom he had an acquaintance before Napoleon attained greatness ; and he was a friend of Chénier, Danton, Camille Desmoulins, and other revolutionists. He made his last appearance 11th June 1826. and died at Paris 19th October of that year.

Talma was the author of *Mémoires de Le Kain, précédés de Réflexions sur cet Acteur et sur l'Art Théâtral,* contributed to the *Collection des Mémoires sur l'Art Dramatique.* It was published separately at Paris in 1856, under the title *Réflexions de Talma sur Le Kain et l'Art Théâtral.* See *Mémoires de J. F. Talma, écrits par lui-même, et receuillis et mis en ordre sur les papiers de sa famille,* by Alex. Dumas (1856).

TALMUD signifies—(1) “study of and instruction in anything (whether by any one else or by oneself)” ;@@1 (2) “learning acquired”;@@2 (3) “style, system”:@@3 as such it is synonymous with *Mishnah* in its fifth signification, vol. xvi. p. 503 ; (4) “ theory,” in contradistinction to “ prac­tice,”@@4—synonymous with *Midrash* in its fourth significa­tion, vol. xvi. p. 285 ; (5) such interpretation of the Mosaic law as is apparent on the surface thereof and does not necessitate any further disquisition;@@5 (6) *Boroitho,* or the non-canonical *Mishnah* ;@@6 (7) *Gemara, i.e.,* the oldest com­mentary on the canonical *Mishnah* ;@@7 (8) the texts of *Mish­nah* and *Gemara* combined,—the meaning which is the one most commonly attached to the term *Talmud.* Although the word *Talmud* is not to be found in the Bible, there can be little doubt that it is a classical Hebrew term, as may be seen by the analogy of *Tahănūn,* “supplication,” *Tan- hūm, "* consolation,” &c.

*Recensions of the Talmud.—*The Talmud exists in two recensions,—the Palestinian, commonly, but by mistake, called *Talmud Yerushalmi* (see below), and the Babylonian, correctly called *Talmud Babli.* The *Talmud Yerushalmi* embodies the discussions on the Mishnah *(q.v.)* of hundreds of doctors, living in Palestine, chiefly in Galilee from the end of the 2d till about the middle of the 5th century, whilst the Babylonian Talmud embodies chiefly the discussions on the same *Mishnah* of hundreds of doctors living in various places in Babylonia, such as Neharde'a,@@8

@@@1 Compare *Mishnah, Peak,* i. 1, כננר לם כ ח (“ and the studying of the Law balances them all”) ; *Aboth,* iv. 13, T,∏T ΊΠ Ιl⅛2 (“be circumspect as regards instruction”).

@@@2 See Perek Rabbi Meir, 6, ΠflDt>Πב 12תt7 DUÖ «Si (“whose heart is not arrogant on account of his learning”); *cf.* T. B., *Pesahim,* leaf 49*a* ; Ι3D0 111θSr∏ (“his learning becomes forgotten by him”).

@@@3 See T. B., *Synhedrin,* leaf 24α, Sz∏ ⅛ ΓΠflθS∏ (“the mode of study prevalent in Babylonia”); comp. T. B., *Pesahim,* 34*b*, 'K⅛2 i□k>πoι pιmt κjnsα '□nπ ehbo wm

(“ foolish Babylonians, who, because ye dwell in a land of darkness, say sayings that are obscure”), and T. B., *Baba Mesi'a,* leaf 85*a*; Rabbi Zera fasted a hundred fasts on going up to Palestine, so that he might forget the style of Babylonico-Talmudic study (ΠK⅛2 ΚΊΟ3 or ∏K⅛3 XT∣E>^Γ∣), that it should not trouble him any further. Rashi takes the quotation from *Baba* *Mesi'a* to signify the concrete Babylonian Talmud, which, however, is impossible.

@@@4 See T. B., *Kiddushin,* leaf 40*b*: “Is theory (ΊΊΟ^Π) greater or practice (∏li,yθ) greater? . . . They all answered, Theory (Ι1θS) is greater because it leads to practice.” *Talmud,* as will have been seen, is here given as synonymous with *Limmud.*

@@@5 See T. B., *Baba Kamma,* leaf 104δ, KDDKp ΠΙD7∏ *V'* (“ I say this is a plain [Mosaic] teaching ”). .

@@@6 See T. B., *Baba Bathra,* leaf 130δ, catchword ]'ΙO∕ ]'X, and *Variæ Lectiones in loco.*

@@@7 See T. B., *Baba Mesi'a,* leaf 33*b*, and compare Rashi *in loco.*

@@@8 The rector of this academy was Shemuel, court physician of Shapur I., and astronomer. Whilst his friend and fellow-pupil Rab (*q.v.;* they both attended the lectures of the principal editor of the *Mish­nah*) excelled in the other parts of the Jewish law, Shemuel was pre­eminent in the civil law. On account of this he is repeatedly called in the Talmud both “Shapur” (like his master) and “ Aryokh” (lion, king, teacher). To him is due the legal principle that “ the law of