difficulty, owing to the presence of gluten, which with water forms a tough elastic body difficult of solution and removal. The diffi­culty is experienced in greatest measure in dealing with wheat, which contains a large proportion of gluten. Wheat starch is separated in two different ways: (1) the fermentation method, which is the original process, and (2) by mechanical means without preliminary fermentation. In the fermentation process whole wheat or wheaten meal is softened and swollen by soaking in water. Wheat grains are, in this condition, ground, and the pulp, mixed to a thickish fluid with water, is placed in tanks, where it ferments, developing acids which dissolve the gummy constituents of the wheat, with part of the gluten, and render the whole less tenacious. After full fermentation, the period of which varies with the weather and the process employed, the starch is separated in a washing drum. It is subsequently washed with water, which dissolves out the gluten, the starch settling in two layers—one comparatively pure, the other mixed with gluten and some branny particles. These layers are separated, the second undergoing further washing to remove the gluten, &c., and the remaining operations are analogous to those employed in the preparation of potato-starch. By the mechanical procèss wheaten flour is kneaded into a stiff paste, which, after resting for an hour or two, is washed over a fine sieve so long as the water passing off continues milky, whereby the starch is liberated and the greater part of the gluten retained as a gluey elastic mass in the sieve. The starch is sub­sequently purified by fermentation, washing and treatment in centri­fugal machines. The gluten thus preserved is a useful food for diabetic patients, and is made with flour into artificial macaroni and pastes, besides being valuable for other industrial purposes. The fermentation process gives about 59 lb of starch and 11 of bran from 100 lb of wheat, whilst the mechanical process gives about 55 lb of starch and 12 of gluten.

Maize (Indian corn) starch is obtained by analogous processes, but, the proportion of gluten in the grain being smaller and less ten­acious in its nature, the operations, whether chemical or mechanical, present fewer difficulties. Under one method the separation of maize starch is facilitated by steeping, swelling and softening the grain in a weak solution of caustic soda, and favourable results are also obtained by a process in which the pulp from the crushing mill is treated with water acidulated with sulphurous acid.

In the preparation of rice-starch a weak solution of caustic soda is also employed for softening and swelling the grain. It is then washed with pure water, dried, ground and sifted, and again treated with alkaline water, by which the whole of the nitrogenous constituents are taken up in soluble form. An acid process for obtaining rice-starch is also employed, under which the grain, swollen and ground, is treated repeatedly with a solution of hydro­chloric acid, which also dissolves away the non-starchy constituents of the grain. The yield is about 85 lb per 100 of rice. Laundry starches are principally made from rice and from pulse.

See O. Saare, *Die Fabrikation der Kartoffelstärke* (1897).

**STAR CHAMBER,** the name given in the 15th, 16th and 17th centuries to an English court of justice. The name is probably derived from the stars with which the roof of the chamber was painted; it was the *camera stellata.* But it has also been derived from a Hebrew word *shetar* or *sh'tar,* a bond, on the supposition that the chamber of meeting was the room in which the legal documents connected with the Jews were kept prior to their expulsion from England by Edward I.

The origin and early history of the court are somewhat obscure. The curia regis of the 12th century, combining judicial, delibera­tive and administrative functions, had thrown off several offshoots in the court of king’s bench and other courts, but the Crown never parted with its supreme jurisdiction. When in the 13th century the king’s council became a regular and permanent body, practically distinct from parliament, this supreme juris­diction continued to be exercised by the king in council. As the ordinary courts of law became more important and more systematic, the indefinite character of the council’s jurisdiction gave rise to frequent complaints, and efforts, for the most part fruitless, were made by the parliaments of the 14th century to check it. The equitable jurisdiction of the chancellor, which grew up during the reign of Edward III. like the courts of law under Henry II., was derived from this supreme judicial power, which was yet unexhausted.

It is in the reign of Edward III., after an act of 1341, that we first hear of the chancellor, treasurer, justices and othèr members of the king’s council exercising jurisdiction in the old chamber, or *chambre de estoiles,* at Westminster. In Henry VI.’s reign one Danvers was acquitted of a certain charge by the council in the *camera stellata.* Hitherto such acts of parliament as had recognized this jurisdiction had done so only by way of limita­tion or prohibition, but in 1453, about the time when the distinction between the ordinary and the privy council first became apparent, an act was passed empowering the chancellor to enforce the attendance of all persons summoned by the privy seal before the king and his council in all cases not determinable by common law. At this time, then, the jurisdiction of the council was recognized as supplementary to that of the ordinary courts of law. But the anarchy of the Wars of the Roses and the decay of local justice, owing to the influence of the great barons and the turbulence of all classes, obliged parliament to entrust wider powers to the council. This was the object of the famous act of 1487, which was incorrectly quoted by the lawyers of the long parliament as creating the court of star chamber, which was in reality of earlier origin.

The act of 1487 (3 Hen. VII.) created a court composed of seven persons, the chancellor, the treasurer, the keeper of the privy seal, or any two of them, with a bishop, a temporal lord and the two chief justices, or in their absence two other justices. It was to deal with cases of “ unlawful maintainance, giving of licences, signs and tokens, great riots, unlawful assemblies ”; in short with all offences against the law which were too serious to be dealt with by the ordinary courts. The jurisdiction thus entrusted to this committee of the council was not supplemen­tary, therefore, like that granted in 1453, but it superseded the ordinary courts of law in cases where these were too weak to act. The act simply supplied machinery for the exercise, under special circumstances, of that extraordinary penal jurisdiction which the council had never ceased to possess. By an act of 1529 an eighth member, the president of the council, was added to the star chamber, the jurisdiction of which was at the same time confirmed. At this time the court performed a very necessary and valuable work in punishing powerful offenders who could not be reached by the ordinary courts of law. It was found very useful by Cardinal Wolsey, and a little later Sir Thomas Smith says its object was "to bridle such stout noblemen or gentlemen who would offer wrong by force to any manner of men, and cannot be content to demand or defend the right by order of the law.”

It is popularly supposed that the star chamber, after an exis­tence of about fifty years, disappeared towards the end of the reign of Henry VIII., the powers obtained by the act of 1487 being not lost, but reverting to the council as a whole. This may have been so, but it is more probable that the star chamber continued to exist side by side with the council, and the two bodies were certainly separate during the latter part of Eliza­beth’s reign. The act of 1540, which gave the king’s pro­clamation the force of law, enacted that offenders against them were to be punished by the usual officers of the council, together with some bishops and judges "in the star chamber or else­where.” It is difficult, if not impossible, to draw a clear distinction between the duties of the privy council and the duties of the star chamber at this time, although before the abolition of the latter there was a distinction “ as to their com­position and as to the matters dealt with by the two courts.” During the reign of Elizabeth Sir Thomas Smith remarks’ that juries misbehaving “were many times commanded to appear in the star chamber, or before the privy council for the matter.” The uncertain composition of the court is well shown by Sir Edward Coke, who says that the star chamber is or may be compounded of three several councils: (1) the lords and others of the privy council; (2) the judges of either bench and the barons of the exchequer; (3) the lords of parliament, who are not, however, standing judges of the court. William Hudson (d. 1635), on the other hand, considers that all peers had the right of sitting in the court, but if so they had certainly given up the privilege in the 17th century.

The jurisdiction of the star chamber was as vague as its constitution. Hudson says it is impossible to define it without offending the supporters of the prerogative by a limitation of its powers, or the lawyers by attributing to it an excessive latitude. In practice its jurisdiction was almost unlimited.