in August 1138. Early in 1140 he entered the order of the Cluniacs at Pontefract and here he died on the 6th of February 1140. Thurstan was generous to the churches of his diocese and was the founder of several religious houses.

See his life in the *Fasti eboracenses,* edited by J. Raine (1863).

**THYLACINE** *(Thylacinus cynocephalus).* The only known living species of this genus, though smaller than a common wolf, is the largest predaceous marsupial existing. It is con­fined to the island of Tasmania, although fragments of bones and teeth found in caves afford evidence that a closely allied species once inhabited the Australian mainland. The general colour of the thylacine is grey-brown, but it has a series of transverse black bands on the hinder part of the back and loins, whence the name of “ tiger ” frequently applied to it by the colonists. It is also called “wolf,” and sometimes, though less appropriately, “ hyena.” Owing to the havoc it commits among the sheep­folds, it has been nearly exterminated in all the more settled parts of Tasmania, but still finds shelter in the more moun­tainous regions of the island. The female produces four young at a time. (See Marsupialia.)

**THYME.** The genus *Thymus* (nat. ord. Labiatae) comprises a number of fragrant aromatic undershrubs, with very small leaves and whorls of small purple honey-bearing flowers in the axils of the leaves or at the ends of the branches. The common garden thyme, a native of the Mediterranean region, is *Thymus vulgaris·,* the wild thyme of English banks is *T. serpyllum.* Marjoram *(Origanum)* is also closely allied. All these plants are remarkable for their essential oil, to which their fragrance is due. From this oil is produced by distillation the substance known as thymol.

**THYMOL,** C10H14O or C6H3(OH) (CH3) (C3H7) [1:3:6], a methylisopropylphenol isomeric with carvacrol *(q.v.),* is an aromatic substance found with the hydrocarbons cymene, C10H14, and thymene, C10H16, in oil of thyme (from *Thymus vulgaris)* and in other essential oils, *e.g. Carum copticum,* from which it may be extracted by shaking with potassium hydroxide, filtering and precipitating the phenol with hydrochloric acid. It can be prepared from dibrom-menthone (obtained by brominating menthone in chloroform solution) by eliminating two molecules of hydrobromic acid. Thymol crystallizes in large colourless plates, which melt at 44° and boil at 230°. On distillation with phosphorus sulphide it gives cymene.

Thymol has a strong odour of thyme and a pungent taste, and is freely soluble in alcohol, ether, chloroform or olive oil, but almost insoluble in cold water. It is a more powerful antiseptic than carbolic acid, but its insolubility prevents its being used for the same purposes. A saturated solution (1 in 1000 of warm water), thymol gauze and an ointment are used. Externally it is anti- parasitic, and is used in certain stages of eczema and psoriasis, and the alcoholic solution has been used in ringworm; internally it has been employed as an intestinal antiseptic in typhoid fever. Its chief use is as an anthelmintic to destroy the *Ankylostoma duodenale.* Thymol may colour the urine green. Thymol iodide, official in the United States, is a compound of iodine and thymol ; it is also known as aristol or annidahn. It was introduced as a substitute for iodoform and is stated to be less toxic. *Glycothymolin* is a proprietary preparation, used in the treatment of catarrhal condi­tions of mucous membranes, while a mixture of naphthalene, camphor and thymol is sold under the name of thymolin.

**THYROID** (Gr. *θυpoeιδήs,* shield-shaped, from *Θυρeós,* a large oblong shield, shaped like a door, *Ούρα,* and *eiδos,* form), in anatomy, a term applied (r) to the largest of the cartilages of the larynx (see Respiratory System), (2) to one of two arteries which he near the thyroid cartilage and gland (see Arteries), and (3) to a vascular ductless gland, which rests on the larynx and upper part of the trachea (see Ductless Glands). The thyroid gland is used in medicine in two forms. *Thyroideum siccum* is a light dull brown powder, prepared by drying the thyroid gland of a sheep. Its chief constituent is a proteid known as thyreoglobulin, the active principle of which contains 9∙3% of iodine and 0∙5% of phosphorus, and is known as iodothyrin or thyroiodin. The dried gland easily becomes damp and deteriorates. *Liquor thyroidei* is a pink turbid liquid made by macerating the fresh gland of a sheep with glycerin and phenol.

Thyroid gland administered to man increases the pulse rate, causes increased and enfeebled cardiac beat and leads to increased metabolism, consequently excess of urea, uric acid and phosphates are excreted in the urine; it therefore reduces the body weight. Glycosuria develops from the inability of the body to ingest glucose. Overdoses of thyroid cause rapid pulse, headache and vomiting, together with diarrhoea and pruritus, emaciation and weakness. These symptoms arc known as *thyroidism.*

Thyroid gland was introduced for the treatment of patients suffering from goitre, myxoedema and cretinism, in which diseases it has been remarkably successful, cretins growing rapidly under the thyroid treatment and developing intelligence. It has also been used in dwarfism, excessive obesity, psoriasis and scleroderma. When used in obesity an excess of nitrogenous food should be taken to balance the destruction of proteid. In certain forms of insanity, melancholia and climacteric insanities it has given good results. Full doses of thyroid are valuable in the prevention and relief of eclampsia. It should not be given to patients suffering from exophthalmic goitre, for which an anti-thyroid serum (anti- thyreoidin of Moebius), which is the serum of thyroidectomized animals, has been introduced.

Rodagen is a white powder consisting of the dried milk of thyroi­dectomized goats, mixed with 50 % of milk sugar. In exophthalmic goitre this preparation causes a reduction of the swelling and of the pulse rate, and an increase of body weight.

**THYROSTRACA,** an order of Crustacea, comprising barnacles, acorn shells and some allied degenerate parasites. The embryos are free-swimming, active forms, but in adult life the animals are fixed head downwards, and are very degenerate. The body is indistinctly segmented, and is enveloped in a fold of the integument, usually with calcareous plates. The anterior antennae are fused with the anchoring attachment, whilst the posterior pair is vestigial, and the appendages of the mouth and body present various degrees of degeneration and specialization. In most cases the adults are hermaphrodite, but unisexual forms also occur, whilst the hermaphrodite adults may carry with them minute “ complementary ” males. In strong con­trast with the condition in most Crustacea, the spermatozoa are mobile. As shown by Burmeister in his historical review (1834), these animals, comprised by Linnaeus in the genus *Lepas,* first received a more comprehensive title from Cuvier, who called them Cirrhopoda, a word strictly meaning tawny- footed. Lamarck in 1809 altered this into the hybrid form Cirrhipoda, meaning curl-footed, which was subsequently improved into Cirripedia or Cirrhipedia. So long as the group was held to be a subordinate member of the Entomostraca, this term, though not the earliest, was generally accepted. The name Thyrostraca, meaning doorshells or valve-shells, is pre­ferred as agreeing in termination with the titles of the other two divisions, the Malacostraca and Entomostraca. The group may conveniently be arranged in two principal sections—the Genuina with cirrhiform feet, and the Anomala without them.

*Thyrostraca genuina.—*It is with these that Darwin’s classical treatises *(Ray Soc.* and *Palaeont. Soc.,* 1851-1854) are almost exclusively concerned. Therein an order Thoracica comprehends the pedunculate Lepadidae, together with the operculate and sessile Balanidae and Verrucidae; a single species without cirrhi constitutes the order Apoda, and a single species with only three pairs of cirrhi the order Abdominalia. Within the last *Kochlorine* (Noll, 1872) with two species, and *Lithoglyptes* (Aurivillius, 1892) with three species, have since been included. But H. J. Hansen *(Die Cirripeaien der Plankton-Expedition,* 1899) states that *Cryptophialus minutus,* for which the order Abdominalia was founded, has, like *Alcippe* and other Genuina, its cirrhi on the thorax, not, as Darwin wrongly supposed, on the abdomen. In place, therefore, of the Abdominalia, it will be right to accept the family Cryρto- phialidae, v. Martens, side by side with the Lithoglyptidae of Aurivillius and the Alcippidae of Gerstaecker. These, with Darwin's three families above mentioned, complete the section of genuine cirripedes now existing. Gruvel submitted to the Linnaean Society a rearrangement of the Lepadidae, unfortunately using for the first of his new families the preoccupied name Anasρidae. It is con­fusing, but not uninstructive, to find that within the Balanid group such generic titles as *Stephanolepas* and *Platylepas* have been coined. The vernacular name barnacle, traceable to the fable of pedunculate cirripedes hatching out into bernicle geese, has also been transferred to the sessile cirripedes, which are popularly known as acorn barnacles. A complete list of all the recent species of Thyrostraca in both sections, down to the year 1897, was published by Weltner *(Arch. Nature.,* 1898, § 63. pt. i. pp. 227-280). For fossil species, Woodward’s *Catalogue of Brit. Foss. Crust.* (1877), pp. 137-144, should be consulted. Hoek