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diaphragm. Called also *Hertwig's s.* and *s. of Hertwig*. 2. the epithelial portion of the hair follicle, divided into the inner root sheath and the outer root sheath, which gives rise to the sebaceous glands. *Scarpa's s.*, fascia cremasterica.

Schwalbe's s., the thin envelope of an elastic fiber.

s. of Schwann, neurilemma.

Schweigger-Seidel s., a spindle-shaped thickening in the walls of the second portion of the arterial branches forming the penicilli in the spleen; see *sheathed artery*, under *artery*. Called also *ellipsoid*.

spiral s., a heavily staining filament winding around the axial filament of the middle piece of a spermatozoon.

s. of styloid process, vagina processus styloidei.

synovial s., *intertubercular*, vagina synovialis intertubercularis.

synovial s. of bicipital groove, vagina synovialis intertubercularis.

synovial s. of intertubercular groove, vagina synovialis intertubercularis.

synovial s. of tendon, vagina synovialis tendinis.

synovial s. of tendons of foot, vaginae synoviales digitorum pedis.

tendinous s's of flexor muscles of fingers, vaginae fibrosae digitorum manus.

tendinous s's of flexor muscles of toes, vaginae fibrosae digitorum pedis.

tendinous s. of leg, fascia cruris.

tendinous s. of long peroneal muscle, *plantar*, vagina plantaris tendinis musculi fibularis longi.

tendon s., vagina tendinis.

tendon s. of anterior tibial muscle, vagina tendinis musculi tibialis anterioris.

tendon s's of long extensor muscles of toes, vaginae tendinum musculi extensoris digitorum longi pedis.

tendon s's of long flexor muscles of toes, vaginae tendinum musculi flexoris digitorum longi pedis.

tendon s. of posterior tibial muscle, vagina tendinis musculi tibialis posterioris.

Sheehan's syndrome (she'an2) [Harold Leeming Sheehan, English pathologist, born 1900] see *postpartum pituitary necrosis*, under *necrosis*.

sheep-pox (shēp-poks) a contagious disease of sheep caused by a poxvirus, which is characterized by fever, systemic disturbances, and widespread skin lesions on non-woolbearing areas or where the hair is not long; it is usually more severe, often fatal, in younger animals. Called also *ovine smallpox* and *variola ovina*.

sheet (shēt) 1. a rectangular piece of cotton, linen, etc., for a bed covering. 2. any structure resembling such a covering.

β s., *beta s.*, *β pleated s.*, *beta pleated s.*, *pleated s.*

draw s., a folded sheet placed under a patient in bed so that it may be withdrawn without lifting the patient.

drip s., a wet sheet from which the water is wrung out and which is then wrapped around a patient standing in a tub of water.

pleated s., a secondary structure occurring in many proteins, consisting of several polypeptide chains running in the same direction (a parallel pleated sheet) or in alternating directions (an antiparallel pleated sheet) and joined by hydrogen bonds between the imino hydrogen of each peptide bond and the carbonyl oxygen of a peptide bond in the next chain over. Called also *β structure*, *β s.*, and *β pleated s.*

secretory s., the simplest form of multicellular gland, consisting of secreting cells alone, e.g., the surface epithelium of the mammalian gastric mucosa.

shelf (shēlf) a broad, flat surface, normal or abnormal, in the body.

buccal s., the surface of the mandible from the residual alveolar ridge or the alveolar ridge to the external oblique line in the region of the lower buccal vestibule; it is covered with cortical bone.

dental s., the shelflike epithelial invagination formed by the dental ridge, beneath which the dental papillae are formed.

mesocolic s., the transverse mesocolon and the great omentum taken together.

palatine s., see *lateral palatine process* and *median palatine process*, under *process*.

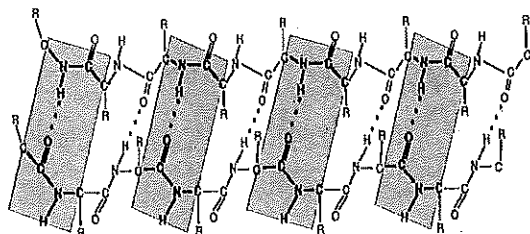


Diagram of a portion of a pleated sheet structure formed by interstrand hydrogen bonding between two polypeptide regions.

shel-lac (shə-lak') a product of lac from India, produced on various plants by an insect, *Laccifer lacca* Kerr (Coccidae); sometimes used in dentistry and surgery, and in coating confections and medicinal tablets.

Shen-ton's line (arch) (shen'tonz) [Edward Warren Hine Shenton, English radiologist, 1872-1955] see under *line*.

Shepherd's fracture (shep'ards) [Francis John Shepherd, Canadian surgeon, 1851-1929] see under *fracture*.

Sherman plate (shər'mən) [Harry Mitchell O'Neill Sherman, American surgeon, 1854-1921] see under *plate*.

Sher-ring-ton (sher'ing-tən) Sir Charles Scott. English physiologist, 1857-1952; co-winner, with Baron Adrian of Cambridge, of the Nobel prize for medicine or physiology in 1932 for their work on the function of the neuron and particularly for his studies of reflex action and neurophysiology.

Sher-ring-ton's law (sher'ing-tanz) [Sir Charles Scott Sherrington] see under *law*.

Shib-ley's sign (shib'lēz) [Gerald Spencer Shibley, American physician, 1890-1981] see under *sign*.

shield (shēld) any protecting structure.

Buller's s., a watch glass fitted over the unaffected eye to guard it from infection from the affected eye.

embryonic s., the double-layered disk from which the embryo proper develops; see *embryonic disc*, under *disc*.

eye s., a covering for the eyes to protect them from light or injury.

lead s., in radiology, a lead barrier for protecting personnel from radiation.

nipple s., a cover to protect the nipple of a nursing woman.

oral s., see under *screen*.

shift (shift) a change, as of position or status.

chloride s., the exchange of chloride (Cl⁻) and bicarbonate (HCO₃⁻) between the plasma and the red blood cells; it takes place whenever HCO₃⁻ is generated or decomposed within the red cells. Called also *Hamburger phenomenon* or *interchange*.

Doppler s., the magnitude of the change in frequency caused by the Doppler effect.

s. to the left, an increase in the percentage of neutrophils that have only one or two lobes, seen in some bacterial infections. See *Armeth count*, under *count*.

Purkinje s., see under *phenomenon*.

s. to the right, an increase in the percentage of neutrophils with 5 or more lobes, seen most often in cobalamine and folate deficiencies. See *Armeth count*, under *count*.

antigenic s., a sudden, major change in the antigenicity of a virus, seen especially in influenza viruses, resulting from the recombination of the genomes of two virus strains; it is associated with pandemics because hosts do not have immunity to the new strain. Cf. *antigenic drift*, under *drift*.

Shi-ga's bacillus, toxin (she'gahz) [Kiyoshi Shiga, Japanese physician, 1870-1957] see *Shigella dysenteriae* type 1, and see under *toxin*.

Shi-gel-la (shī-gel'ə) [Kiyoshi Shiga] [MeSH: Shigella] a genus of gram-negative, facultatively anaerobic, rod-shaped bacteria of the family Enterobacteriaceae, made up of nonmotile bacilli that cannot utilize citrate as a sole carbon source and that ferment carbohydrates with acid but no gas production. The genus consists of four species, differentiated by biochemical reactions: *S. dysenteriae* (subgroup A), *S. flexneri* (subgroup B), *S. boydii* (subgroup C), and *S. sonnei* (subgroup D). Their normal habitat is the intestinal tract of humans and higher monkeys; all species cause dysentery. See also *shigellosis*.

S. ambigua, *S. dysenteriae* type 2.

S. arabinotar'da type A, *S. dysenteriae* type 3.

S. arabinotar'da type B, *S. dysenteriae* type 4.

S. boy'dii, a species that causes acute diarrheal disease in humans, especially in tropical regions. It has 15 serological types; all ferment mannitol but not lactose.

S. ceylonensis, *S. sonnei*.

S. dysenteriae, a highly pathogenic species that causes severe dysentery, separable into 10 serologic types; it does not ferment lactose or mannitol. *S. dysenteriae* type 1, the classic Shiga bacillus, produces a potent neurotoxin and causes epidemic dysentery, which can be fatal in children. *S. dysenteriae* type 2, the Schmitz bacillus, is serologically related to *Escherichia coli* type 0112; it is the cause of occasional epidemic diarrheal disease in humans and among captive chimpanzees. The other numbered types of dysentery bacilli include the parashiga, the Large-Sachs, and the arabinotar'da groups. Formerly called *Bacillus dysenteriae* and *Bacterium dysenteriae*.

S. etou'sae, *S. boydii* type 7.

S. flexneri, a species that causes severe dysentery. It has six serotypes and two variants (X and Y); type 2 produces an enterotoxin.