### FAUL | 2018/2019 | MGG | 1º semestre

**Teacher:** Luís Mateus

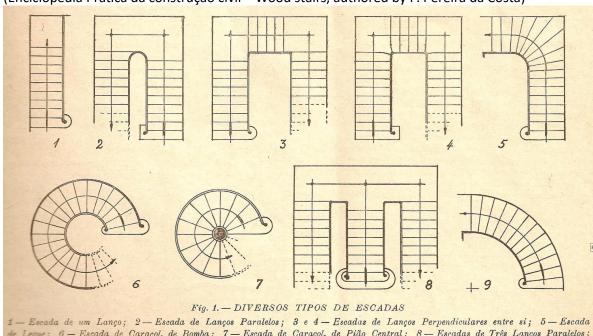
Week 3 18/Out - F & G 19/Out - E & PL

- Circular stairs. Types of stairs. Differences between stairs according to
- Geometric modelling of circular stairs (exercise 3).

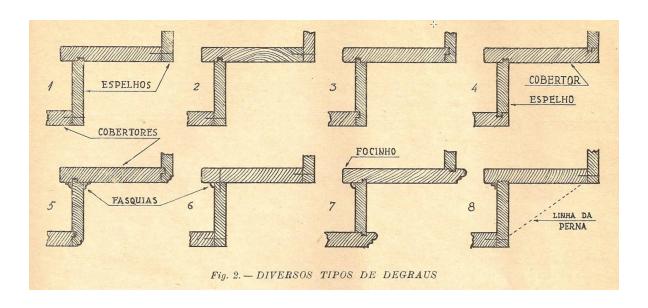
### Exercise 4 (weight: 4)

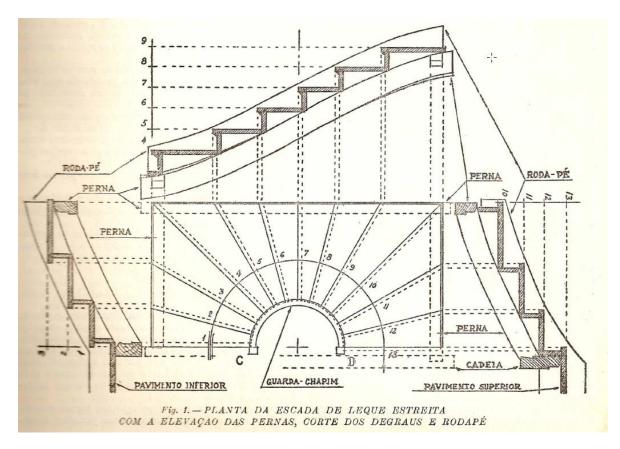
- From the last set of images (stone stairs), model 1 of the 3 stairs using Rhinoceros. Notice that you only need to model one step. The step should be a single piece. The complete stairs will result from the addition of multiple steps. The width of each step should be 100cm + X where X is the sum of the digits of your student's number (in cm).
- Do a report, in PDF, illustrating and describing the modelling process and the results obtained.
- The delivery of the exercise (file \*.3dm + \*.pdf in a zipped folder named XXXXXXX 4.zip where XXXXXXX corresponds to your student number) should be done via Wetransfer or by email:
- >> until the 24h of 28/10/2018

### (Enciclopédia Prática da construção civil – Wood stairs, authored by F. Pereira da Costa)



1 — Escada de um Lanço; 2 — Escada de Lanços Paralelos; 3 e 4 — Escadas de Lanços Perpendiculares entre si; 5 — Escada de Leque; 6 — Escada de Caracol, de Bomba; 7 — Escada de Caracol, de Pião Central; 8 — Escadas de Três Lanços Paralelos; 9 - Escada de Leque, de Volta Larga





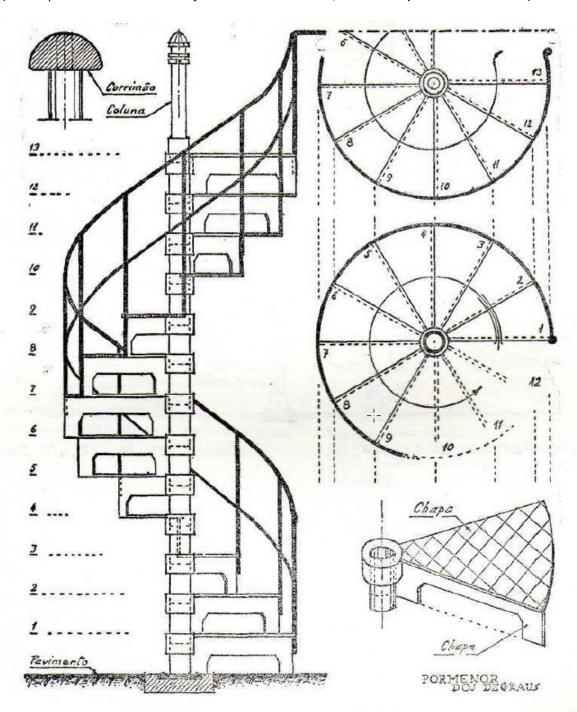


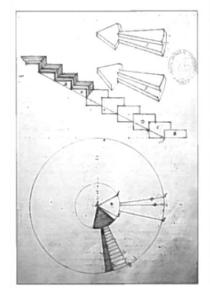
Fig. 11. — ESCADA DE CARACOL (Alçado, Plantas e Pormenores)

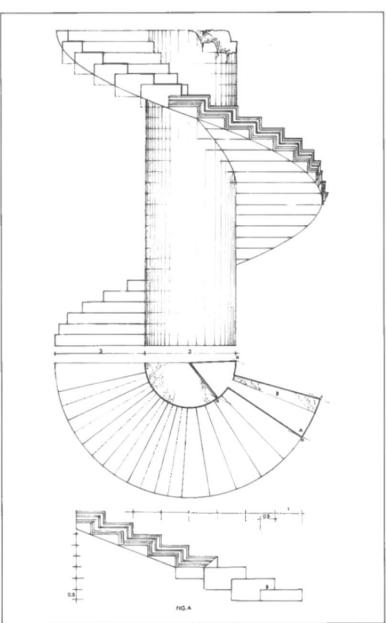
(all the following images were retrieved from the book "Trazas y cortes de canteria en el renacimiento español" authored by José Carlos Palacios).

# DECLARACION DEL CARACOL EXENTO

«Ofrécese algunas veces haber de hacer un caracol para salir a algún órgano u a otra parte que sea menester que no embarace por la angostura que puede haber, el cual se podrá hacer exento altededor de una columna como parece en la traza...»

Vandelvira, pg. 51 v

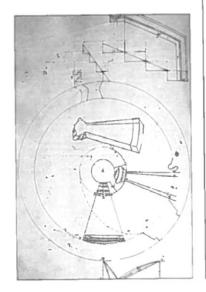


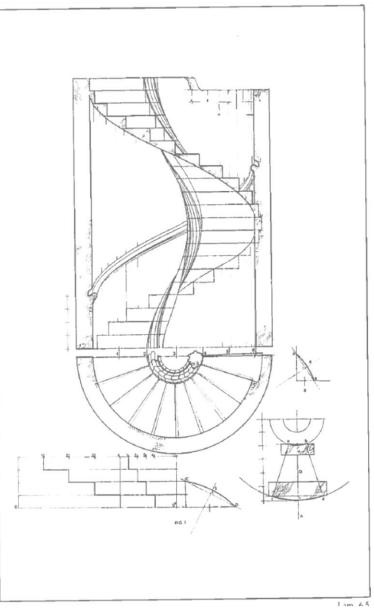


## DECLARACION DEL CARACOL DE MALLORCA

«Para trazar este caracol harás así que trazarás la caja, luego partirás el diámetro en seis partes y con la una harás el ojo...»

Vandelvira, pg. 51 r





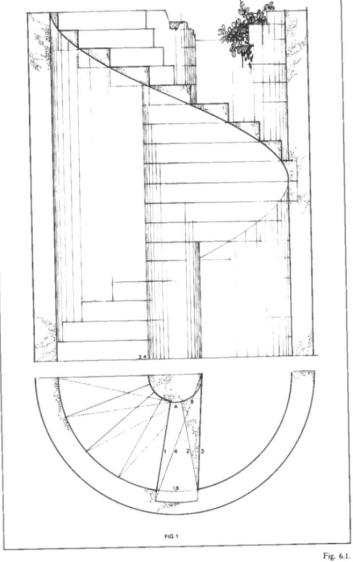
### DECLARACION DEL CARACOL DE HUSILLO

«Primeramente trazarás la caja de la parte de adentro, que la caja de afuera no todas veces guarda el redondo, antes se acomoda con la parte donde está pegada...»

Vandelvira, pg. 49 v

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Lam 6.1.