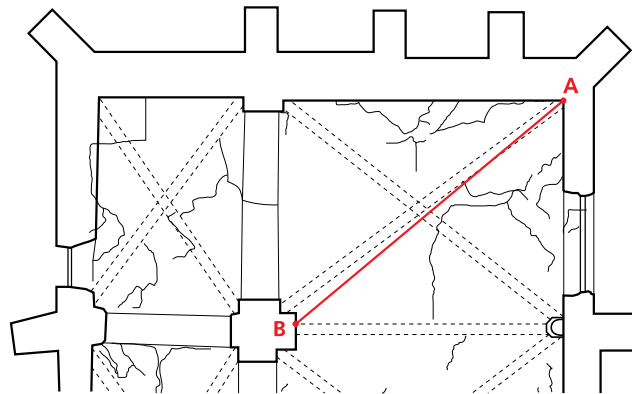


The G20 unit (or the recording strain gauge)

The Saugnac recording strain gauge, or G20 unit, which uses the measurement, amplification and recording qualities of the G2 Gauge, makes it possible to monitor to the nearest 1/10th of a millimetre, the changes between 2 distant points A and B.

The distance between these points may be several metres.

The G20 unit is used particularly to study the "movement in space" of structures.



Example:
recording the distortion in the base of diagonal ribs
of vaulting 7.20 m across.

Church of Saint Saturnin de la Forêt Croix (91)
State Certified Architect, National Heritage -
Louis PRIEUR

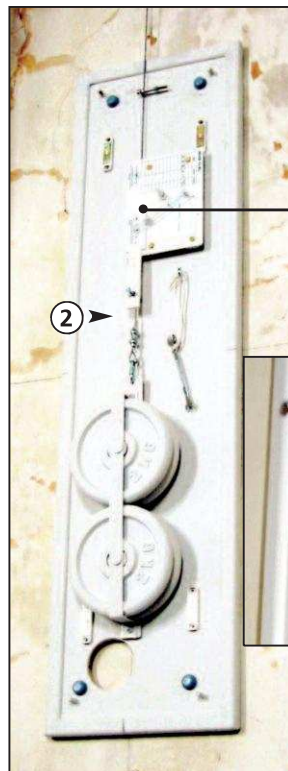
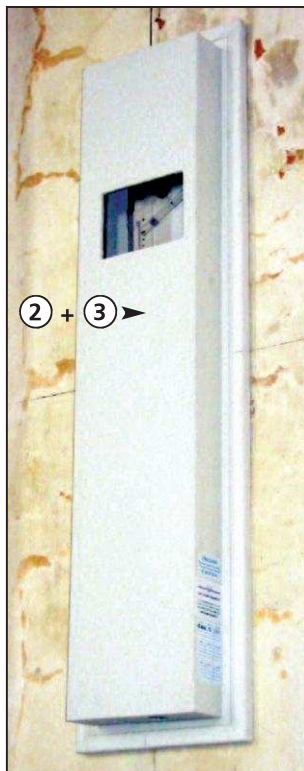
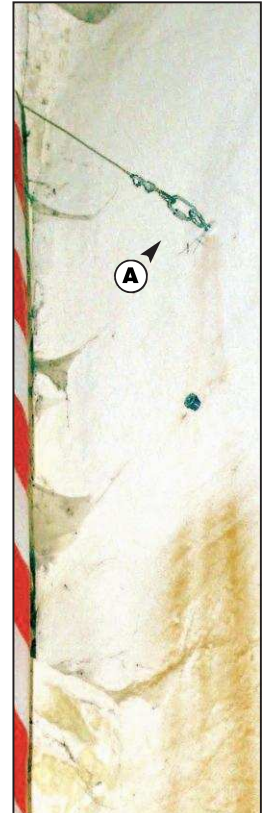
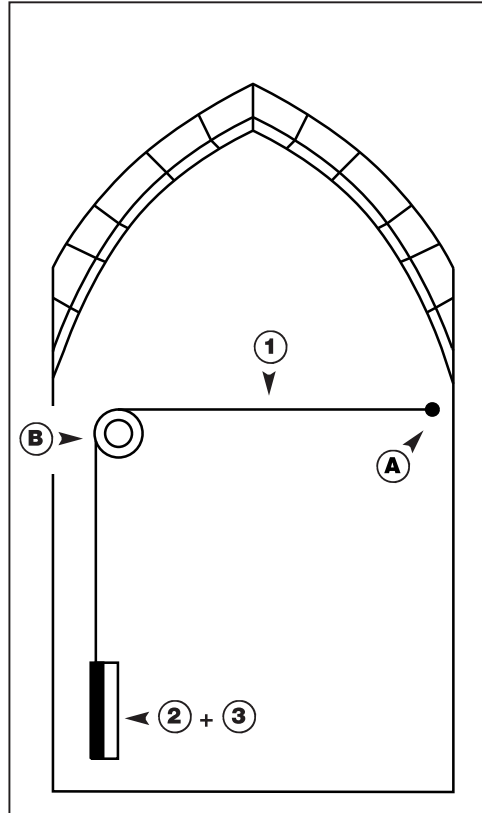
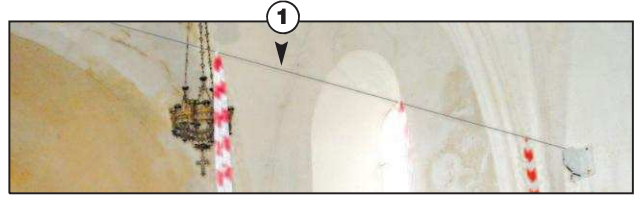


Example:
recording the yielding of load-bearing walls of barrel/groin vaulting.
Medina of FÈs - Medersa Attarine XIV century

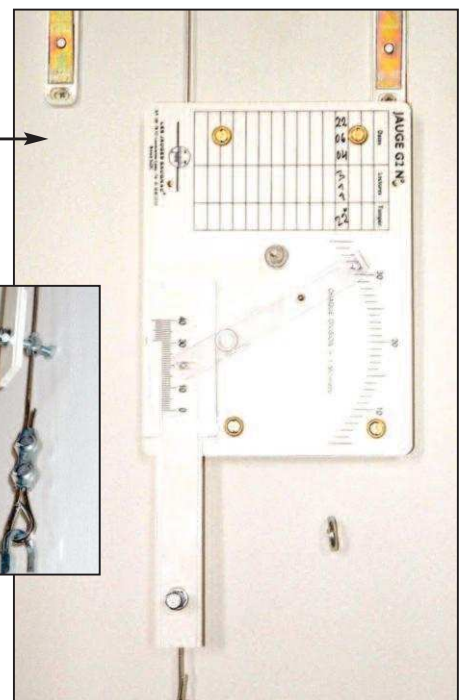
Details of the G20 unit

Diagram of vaulting fitted with a G20 unit

- ① Cold drawn invar wire 1,65 mm Mean coefficient of linear expansion = $4,4 \times 10^{-7} / ^\circ\text{C}$ between 20 and 100°C
- Ⓐ Fixed point
- Ⓑ Return pulley with ball bearings
- ② Unit
- ③ Protective cover



Recording the deformation



Specific case studies