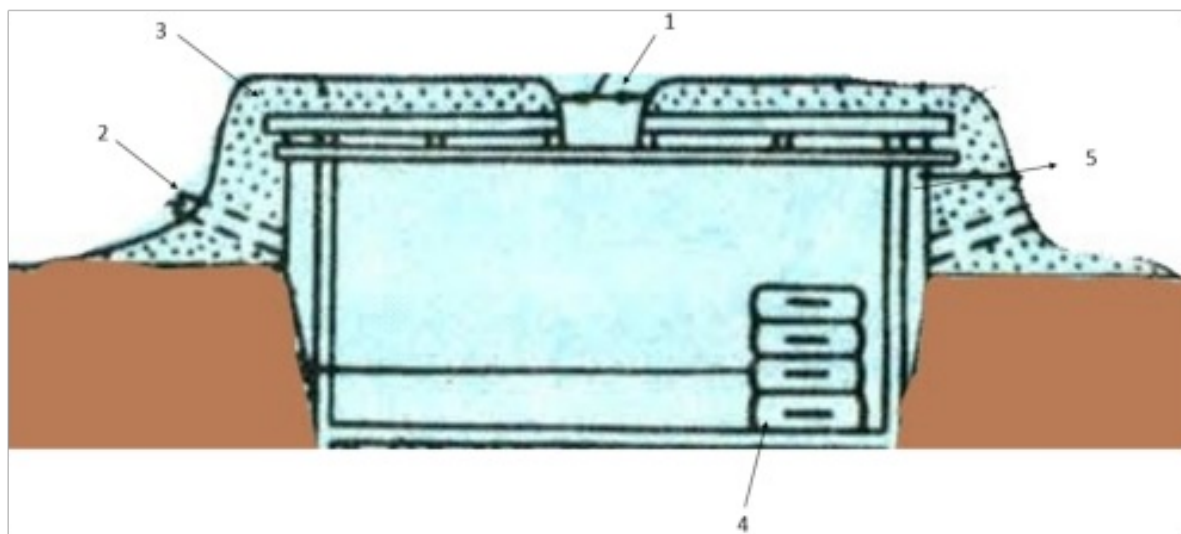


Semi-underground cellar:

 Dynamo EMSE




https://wiki.lowtechlab.org/wiki/Cellier_en_sous_sol/en

Dernière modification le 04/03/2020

 Difficulté **Moyen**

 Durée **3 heure(s)**

 Coût **5 EUR (€)**

Description

As the drawing shows, it is a semi-underground cellar used to store vegetables and fruit. Thanks to the difficulty of heat transfer in the underground, the cellar is able to have a constant temperature all year round, 0°C- 5°C. In addition, the tightness of the cellar ensures humidity. It is suitable for onions, garlic, zucchini, potatoes, cabbage, etc.

Sommaire

Sommaire

Description

Sommaire

Étape 1 - Making a hole

Étape 2 - Construction of the Cellar

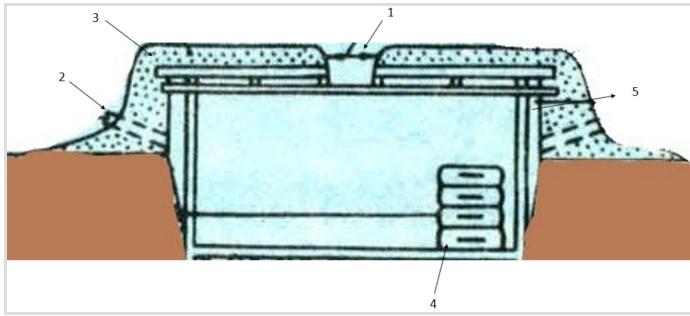
Étape 3 - Creation of a sealed entrance

Étape 4 - Bury the cellar with soil

Étape 5 - Adding water

Notes et références

Commentaires



Matériaux

Entrance to the Cellar
 Exhaust Vent
 Soil
 Boxes of vegetables and fruit
 Stone walls and ceiling

Outils

Étape 1 - Making a hole

First, we dig a big pit in the ground.

Étape 2 - Construction of the Cellar

And then we build a cellar using stones and cement. Remember to create two exhaust vents. Since in the cellar there are a lot of gases like CO₂, CH₄, etc. and it lacks O₂. So before entering the cellar, we need to open the exhaust vents to have enough O₂.

Étape 3 - Creation of a sealed entrance



Étape 4 - Bury the cellar with soil

Étape 5 - Adding water

We have to put some water in the cellar. When it's too cold, water will freeze and produce heat. On the other hand, it will volatilize to absorb the heat.

Notes et références

Advantage:

- Being able to avoid the sun and have a constant temperature all year round.
- The accumulation of CO₂ and the lack of O₂ slow down the rottenness of fruits and vegetables.
- In addition, it is quite easy to build and will be used for a long time.
- It can conserve a large batch of vegetables and fruits.
- The height difference between the entrance and the ground prevents the entry of water when it rains often.

Disadvantage:

- It will produce swamp gas, so be careful before entering the cellar to avoid explosion.
- Not suitable for all foods, such as meat, fish, bananas, etc.

