C. E. MYERS.

DOOR BLOCK FOR SILOS.

APPLICATION FILED JUNE 22, 1918.

1,354,507. Patented Oct. 5, 1920.

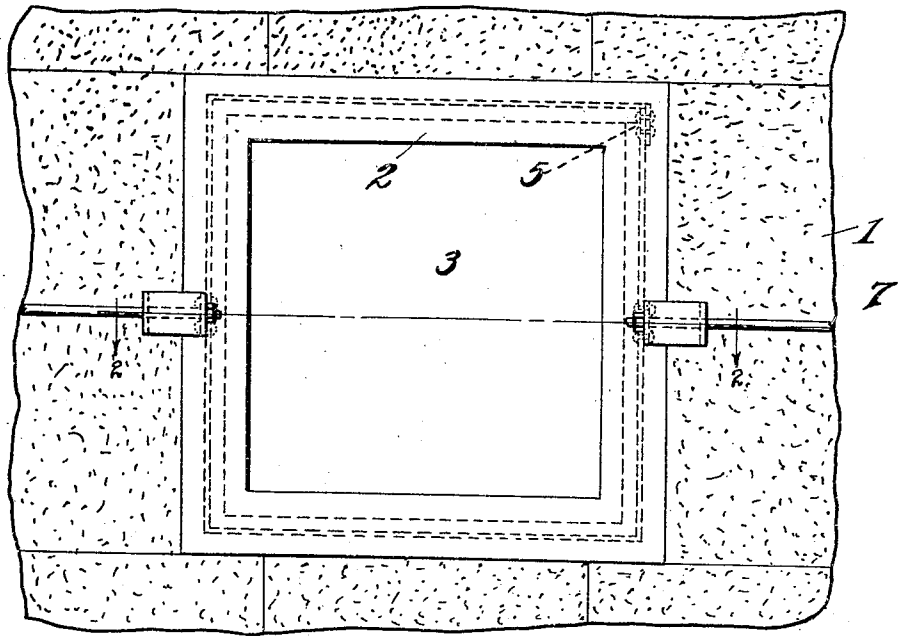


Fig. 1

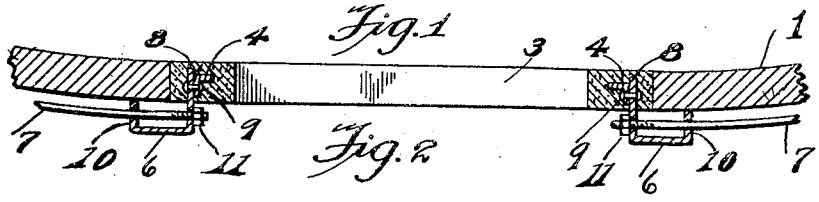


Fig. 2

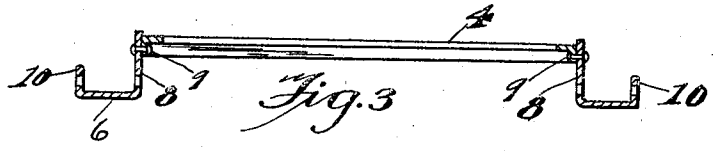


Fig. 3

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DOOR-BLOCK FOR SILOS.

1,354,507. Specification of Letters Patent. Patented Oct. 5, 1920.

Application filed June 22, 1918. Serial No. 241,394.

To all whom it may concern:

Be it known that I, CLARENCE E. MYERS, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Door-Blocks for Silos, of which the following is a specification.

This invention relates to silo door block construction and is designed particularly as an improvement for use in the type of door blocks used in building cement stave or block silos. In this construction, it is customary to form a block of sufficient size and provide the same with a suitable opening to operate as a door opening and mount these blocks successively in position as the silo is built up. It is my aim to improve and strengthen these blocks to such an extent that they will not readily be broken and at the same time facilitate the ready attachment of the silo hoops or circumferential tie rods. My invention therefore, broadly stated, takes the form of a reinforcement embedded in the material of the door block and anchor clips secured to this reinforcement but projecting outwardly therefrom in such form and arrangement as will facilitate the ready attachment of the silo hoops or tie rods.

The preferred embodiment of my invention is shown in the accompanying sheet of drawings wherein similar characters of reference designate corresponding parts and wherein,

Figure 1 is a view in side elevation of a door block shown in position and constructed in accordance with my invention,

Fig. 2 is a horizontal section taken on line 2—2 of Fig. 1 and

Fig. 3 is a similar horizontal section showing the endless reinforcement with anchor clips attached separately.

In Figs. 1 and 2, the silo is designated by the reference numeral 1 and is shown as being built from cement blocks although it will be understood that my invention is not limited to the use of this type of construction. The door openings for a silo to which my invention is applicable are formed by means of a plurality of blocks 2 provided with a central door opening 3 and formed of such size as to be readily adapted to the size of the material from which the silo is built. These blocks are usually formed of cement and built upon the ground as the silo is being erected. It is my intention that a reinforcement member such as the angle shown at 4 will be placed in the mold as the block is being formed so that this reinforcement is embedded in the block itself. The angle member is shown as being shaped to endless form and its ends united as shown at 5. The opposite sides of this angle reinforcement are provided with anchoring clips such as shown at 6 which clips are designed to receive the ends of the silo hoops 7. The clips themselves are secured in holding relation with the reinforcement so that both may be readily set in position in the mold. The clips themselves are somewhat U-shaped, the legs 8 being secured to the angle by means of the rivets shown at 9 and the opposite legs 10 being bent down a distance to engage the silo body after the manner shown in Fig. 2. Both legs are provided with openings through which the tie rods may pass and then be held in adjusted position by means of the nuts 11.

From the foregoing description, taken in connection with the accompanying sheet of drawings, it will be apparent that I have provided a structure whereby the door slab may be guarded against breakage and at the same time I combine with this a means for readily securing the tie rods in adjusted position.

What I claim is:

1. In a silo, a door frame provided in said silo and formed from a cementitious material, a metallic reinforcement embedded in and conforming substantially to the contour of said frame, a tie rod arranged to circumferentially embrace said silo and having its ends spaced apart, and a plurality of angle clips rigidly secured to said reinforcement and projecting outwardly therefrom for attachment with the ends of said rod.

2. In a silo, a concrete door frame positioned in said silo, a metallic reinforcement embedded in said frame, anchor clips rigidly secured to said reinforcement and projecting exteriorly of said frame, said clips having their outer ends angularly bent to engage with the silo body, and a tie rod formed to circumferentially embrace said silo and having the ends thereof secured to the outer angular ends of said anchor clips.

3. In a door block for a silo, an angle member shaped to endless form and embedded in the material of said block, and a pair of U-shaped anchor clips for the silo hoop ends projecting to the outside of the silo, one leg of each clip being secured to said angle and the other leg of each clip being adapted to lie in engagement with the silo body, the projecting portion of each clip being provided with means for attaching the silo hoops.

In testimony whereof I affix my signature in presence of two witnesses.

CLARENCE E. MYERS.

Witnesses:
D. C. SNEDEGAR,
C. R. MITCHELL.