

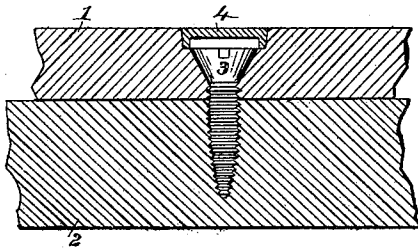
(No Model.)

I. SHARP.

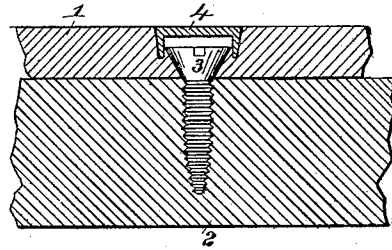
PLUG FOR COUNTERSINKS.

No. 264,776.

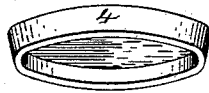
Patented Sept. 19, 1882.



*Fig 1.*



*Fig 2.*



*Fig 3.*

*Attest*

*Geo. P. Smallwood Jr*  
*D. M. Hopkins*

*Invented*

*Isaac Sharp*  
*Knights Bros*  
*att'y.*

# UNITED STATES PATENT OFFICE.

ISAAC SHARP, OF WAVELAND, INDIANA, ASSIGNOR OF ONE-HALF TO  
GEORGE SEYBOLD, OF SAME PLACE.

## PLUG FOR COUNTERSINKS.

SPECIFICATION forming part of Letters Patent No. 264,776, dated September 19, 1882.

Application filed April 20, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, ISAAC SHARP, a citizen of the United States, residing at Waveland, in the county of Montgomery and State of Indiana, have invented certain new and useful Improvements in Plugs for Countersinks and in the Manner of Making the Same, of which the following is a specification.

My invention consists in a hollow plug for filling countersinks in carriage and other work and covering screw-heads seated therein, the rim of the plug resting on the space between the outer edge of the screw-head and the wall of the countersink, so as to allow room for expansion of the screw and prevent the displacement of the plug.

In order that my invention may be more fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1 is a sectional view of a panel or other object to which one of my hollow plugs is applied. Fig. 2 is a sectional view, illustrating a slightly-different method of applying the plug. Fig. 3 is an enlarged perspective view of one of the plugs detached.

1 represents a portion of a panel of a wagon or carriage body or any other object on which a smooth finish is desired.

2 represents a standard or other support, to which the panel 1 is secured by screws, one of which is shown at 3.

The method commonly in use of filling the countersinks or holes above the heads of screws used in securing the panels of wagon and carriage bodies by means of solid wooden plugs is imperfect for several reasons. The plug resting immediately on the screw-head, no room for expansion is allowed between the two, and hence the least expansion of the screw or plug caused by change of temperature or increase of moisture causes the plug to bulge beyond the surface of the panel, rendering the work unsightly and marring the paint by spots, often before it has left the shop. With this kind of plug, also, it is necessary, in order to give the sides of the plug a firm hold on the panel, to make the countersink and plug so deep as to

much impair the strength of the panel. To avoid these difficulties I have conceived the idea of making the plug hollow. I have shown this hollow plug in the drawings at 4 applied within the countersink in two different ways, either of which may be used, according to the thickness of the panel.

In Fig. 1, with a panel about half an inch thick, I have shown the screw sunk, say, five thirty-seconds of an inch below the surface. In the countersink, above the screw-head, I insert a hollow plug, 4. These plugs are cut from a solid block of wood by means of the tool described in my Letters Patent No. 253,115, granted January 31, 1882, in which I have also described a tool by means of which the edges of the plug may be beveled, as shown, to aid its easy insertion. The plug having been driven or pressed well home, the surface is leveled and painted in the usual manner. The hollow plug not only allows for the expanding of the screw due to changes in temperature, but is less liable to excessive swelling itself from changes in atmospheric conditions.

Instead of sinking the screw-head so deep as is shown in Fig. 1, I may, in a thin panel, sink it only very slightly below the surface and ream out around the screw-head, as shown in Fig. 2, so that when the plug is inserted it will cover the head and its rim extend below the top thereof. This method has the additional advantage of strength, as it is necessary to sink the head very slightly, just enough to allow for the thin bottom of the plug between the screw-head and the level of the panel. It is preferred to allow some space between the top of the screw-head and the bottom of the plug, as shown in the drawings, to allow for expansion. The plugs, when driven in, are held best by a water-proof glue, if such can be procured; otherwise a white glue should be used. The glue should have sufficient time to harden before the surface is leveled and smoothed.

The following is claimed as new and of my invention:

1. In combination with a screw-head seated

in a countersink, a hollow plug for covering the screw-head and filling the countersink, said plug having a rim portion surrounding the screw-head and seated in the countersink, substantially as set forth.

5 2. A hollow plug for filling countersinks and covering screw-heads, having a rim portion surrounding and projecting below the top of

the screw-head within a groove at the bottom of the countersink, as and for the purpose set forth.

ISAAC SHARP.

Witnesses:

CHAUNCEY SMITH,  
NOYES LEWIS.