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MAGAZINE CRAYON AND LEAD HOLDER.
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Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6.

Fig. 7.

Fig. 8.

Fig. 9.

Fig. 10.

Fig. 11.

Fig. 12.

Witnesses—
William A. H. Harris,
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To all whom it may concern:

Be it known that I, HERBERT MORTON FULLER, residing in the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Magazine Crayon and Lead Holder, of which the following is a specification.

My invention relates to a magazine crayon and lead holder, in which crayons of different colors or leads of different degrees of hardness, or, an assortment of both may be used in the same holder, and may be manufactured and sold independently of the holder—my object being to produce a holder, by which, simple movements the crayons and leads may interchangeably be brought into use. I attain this by means illustrated in the accompanying drawing, in which, similar letters denote like parts in all figures. Figure 1 is a side view of my improved crayon or lead holder; Fig. 2 is a longitudinal sectional view on the line 2—2, Fig. 6; Fig. 3 is a transverse sectional view on the line 3—3, Fig. 2; showing four crayons; Fig. 4 is a view similar to Fig. 3, showing the holder containing five crayons; Fig. 5 is a perspective view of the spring for retaining the projected crayon in position; Fig. 6 is a plan view of the holder showing the notched slot; Fig. 7 is a perspective view of the separator; Fig. 8 is a sectional view on the line 8—8, Fig. 2; Fig. 9 is a detached side view of one of the crayons; and Figs. 10, 11 and 12 are views of modifications of the ways of making the crayons.

A is a cylindrical tube made of metal, hard rubber, or other suitable material, and having a tapered end B of a right cone formation. The tube may be made of one piece or joined by means of a thread or slip joint as at j. C is a slotted cap mounted on the end of the tube A opposite to the tip B. This cap is arranged to freely turn on the tube, but is held from moving vertically by a rib F adapted to an annular groove G in the cap, as illustrated in Fig. 2. The cap has a head D made of any suitable material. In the head, in the present instance, are four slots s, which can be brought in line with the longitudinal slot d. In one wall of this slot is a series of notches e, as clearly shown in Fig. 6.

K, K are crayons, molded in suitable form, and of a diameter to snugly fit the recesses provided for them. On one of these crayons is a stem t with a head or knob i. The stem is of a diameter to pass through the slots in the head C and casing A. When the head C is turned, one of the slots s will line with the slot d and by pushing on the head i the end of the crayon will be projected through the opening in the end of the conical tip B and can be held in the desired position by simply turning the head laterally so as to force the stem into any one of the notches e in one wall of the slot d.

R is a separator, which extends longitudinally throughout the length of the tube A and, as illustrated in Figs. 3 and 7, consists of four blades which separate the crayons and this separator preferably does not extend to the wall of the tube, but is free to accommodate itself within the tube. It will be noticed that each crayon has a three-point longitudinal contact—one against the tube and one against each of the two blades of the separator so that the crayon is rigidly held throughout its entire length when not projected and there is no liability of the crayon breaking when the holder is roughly handled.

The inner end of the separator rests against a partition m having an opening m', Fig. 8, for the passage of the crayon which is brought in line with the slot d. The other crayons and the separator are prevented from moving longitudinally by this partition, but the crayons, with the separator, are free to turn with the head except when one of the crayons is projected past the partition m and this crayon prevents the cap from turning until it is returned to its normal position with its stem t in the cap.

Z is a spring located within the tip B and preferably fastened therein in any suitable manner. This spring has a body portion z which is of the same contour as the tip and has a portion z' which bears against the crayon and forces it against the inner wall of the tip B. This spring not only steadies the crayon or lead when in use, but forces the crayon against the tube with sufficient force to create a friction which is difficult to overcome when the pencil is in ordinary use so that if a very stiff spring is used the notches e may be dispensed with, but I pre-
fer to provide the notches as they make a more secure fastening for the projected crayon.

By increasing the number of partitions or blades of the separator R and increasing the diameter of the tube A, a greater number of crayons can be located in the holder. For instance, in Fig. 4, I have shown a separator having five blades or partitions and five crayons to accommodate. I preferably make the tip offset, as shown, so that the wall in the opening of the tip for the crayon will form a continuation of the wall of the tube and when the spring presses the crayon against the wall it will have a long bearing which will readily hold the crayon.

In Fig. 9, I have shown the stem t having a right angled portion which is embedded in the crayon K. In Fig. 10 the crayon K is attached to an extension I, the projecting portion of the crayon entering a recess j in the extension I which carries the stem t. This extension may be made of cement, papier-mâché, or other suitable material.

In Fig. 11, the crayon K* is attached to the extension I* by the portion r of the stem t, which is of sufficient length to pass through the extension I* and into the crayon K*.

In Fig. 12, I have illustrated an ordinary sized lead K* having one end projecting into a recess in the extension I* and in the opposite end of this extension the portion r* of the stem t projects. At the opposite end of the lead is a sleeve x, which closely fits the lead and through which the lead may be projected as it is worn away by use. The slots s in the cap C extend beyond the annular recess g therein and the ribs f on the tube are of such a size that the cap can be forced off the tube with pressure in order to substitute new crayons or leads for the ones used and the cap can be placed in position again by forcing it over the rib and when the rib is in line with the groove the cap is firmly held onto the tube.

When using the holder, the cap C is turned until a crayon of the proper color is exposed through the slot d. When the crayon is moved forward by pushing on the head i, it is forced through the opening m in the partition w and past the spring Z (which will yield sufficiently) and out through the end of the tip B to the distance required. When the head I is opposite one of the slots e in the tube it is moved laterally, locating the crayon in the projected position. When the ordinary lead is used, as in Fig. 12, then the sleeve x may be located on the lead so that it will extend through the end of the tip a slight distance and will be in position to be held by the spring Z. This sleeve will remain stationary in relation to the lead when being moved through the tip for the reason that the friction against the inside of the sleeve x is much greater than is developed by the pressure of the spring Z. The sleeve is moved on the lead as the lead is consumed.

While I have illustrated my invention as particularly adapted for use in connection with crayons of comparatively large diameter, the invention can be used with a group of ordinary leads of different hardness. In each case the degree of hardness can be indicated on the heads t.

I claim:

1. The combination in a crayon or lead holder, of a tube having a single longitudinal slot therein; a separator; a head mounted on one end of the tube and arranged to carry the crayons so that one of a series of crayons can be brought in line with the slot in the tube; a tip having an opening at its end on the same side of the center as the slot in the tube; and a spring arranged to bear against the crayon when projected from the tube through the tip so that the crayon will have an extended bearing upon the inner wall of the tip and the inner wall of the tube.

2. The combination in a crayon or lead holder, of a tube having a single longitudinal slot therein, a tip having an opening at its end at one side of the center of the tube and on the same side of the center as the slot in the tube and through which the crayon can be projected from the tube; a head at the opposite end of the pencil arranged to turn on the tube and having a series of slots therein according to the number of crayons so that, on turning the head, the slot therein will align with the slot in the tube and the crayon to be projected will be in a direct line with the opening in the tip; and a separator extending from the cap to the tip and arranged to separate the several crayons, each crayon having a three point contact, two on the separator and one on the inner wall of the tube.

3. The combination in a crayon or lead holder, of a tube having a longitudinal slot therein; a tip; a partition within the tube having an opening for the passage of a crayon; an opening in the tip in line with the opening in the partition, the slot being also arranged in line with the two openings; a spring in the tip arranged to bear against the projected crayon; a cap arranged to rotate freely on the end of the tube opposite the tip; a separator for the crayons, the cap having a slot for each crayon, each cap having a stem arranged to project through the slot so that when the slot of the cap aligns with the single slot in the tube a crayon can be projected through the opening in the partition past the spring and through the opening in the tip.

4. The combination of a tube having a
cylindrical slot and a tip, said tip having an opening in its end at one side of the center; a head mounted at the end of the tube opposite the tip and having a series of longitudinal slots therein; a separator forming a series of cavities, each cavity being capable of retaining a crayon; a partition in the tube having a single opening in line with one of the cavities and the opening in the end of the tip; a spring having a body portion; and a tongue arranged to bear against the side of a projected crayon.

5. The combination in a magazine pencil holder of a casing having a longitudinal slot in one side thereof; a separator within the casing; a cap at one end of the pencil and provided with means to select any one of a series of crayons mounted in the casing; a funnel shaped tip having an opening off center on the same side as the slot in the casing; and means mounted in said tip adapted to exert pressure on a projected crayon or lead.

6. The combination of a magazine crayon holder; a casing provided with a guide slot at one side; a removable cap mounted on one end of the casing and arranged to turn freely thereon and provided with means to engage and to turn crayons within the casing; a separator in the casing independent of said casing or cap; a funnel shaped tip mounted at the opposite end of the casing from the cap and on the same side as the guiding slot; and a flexible means adapted to exert pressure against a projected crayon.

7. The combination in a magazine crayon or lead holder, of a casing adapted to hold a number of crayons or leads, said casing being provided with a single slot at one side and provided with retaining means at one end; a cap arranged to engage said retaining means, said cap being provided with means to turn the crayons or leads selected in alignment with said slot in the casing; a funnel shaped tip at the opposite end of the casing from the cap, said tip being provided with means for holding a projected crayon or lead in position in said tip.

8. The combination in a magazine pencil holder, of a slotted casing; a separator extending the full length of the casing; a revoluble slotted cap at one end of the casing arranged to engage crayons located in the several compartments formed by the separator within the casing so that any one of the slots in the cap can be brought into alignment with the slot in the casing; and a tip having an opening on the same side of the center as the slot and having flexible means for holding a projected crayon.

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Witnesses:

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