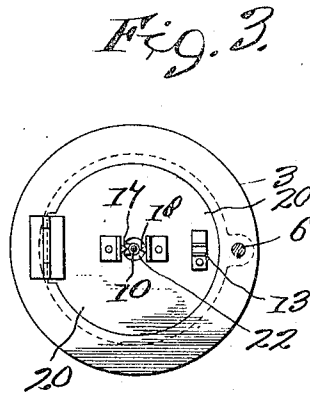
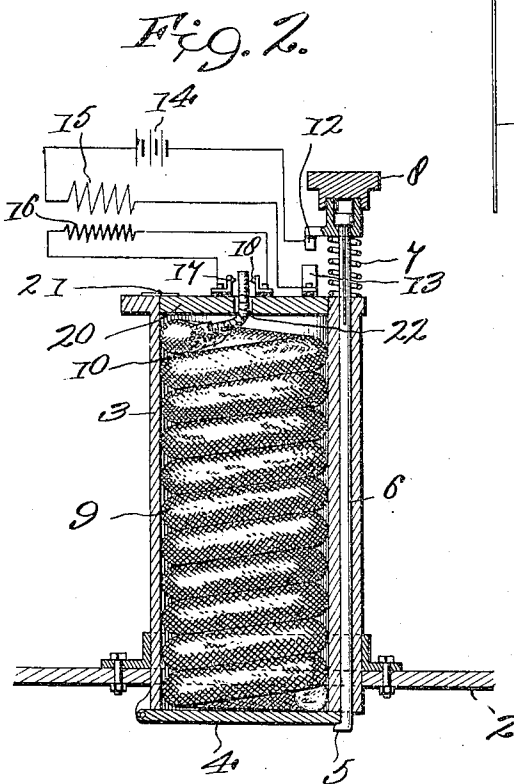
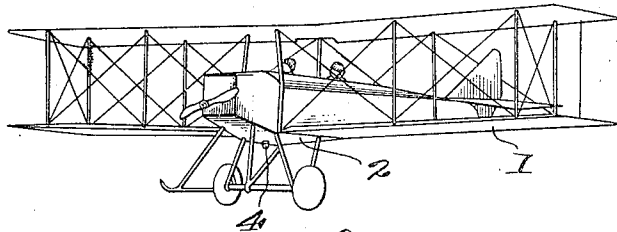


1,237,266.

Fig. 1.



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# UNITED STATES PATENT OFFICE

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INCENDIARY ATTACHMENT FOR AEROPLANES.

1,237,266.

Specification of Letters Patent.

Patented Aug. 14, 1917.

Application filed October 14, 1916. Serial No. 125,686.

*To all whom it may concern:*

Be it known that I, LEWIS NIXON, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Incendiary Attachments for Aeroplanes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My present invention relates to improvements in incendiary attachments for aeroplanes.

During the present war, the use of incendiary bombs from aeroplanes has been common, and such bombs have been more or less effective against buildings and structures of various kinds, but they have proven unsatisfactory in certain instances owing to the fact that the weight of the bomb will cause it to pass through the upper more inflammable portions of a building to the lower portion where fire is less likely to spread rapidly, and can be more readily reached and put out.

More especially have these bombs proved unsatisfactory in setting fire to fields of grain ready for harvest, or setting fire to any brush in woods, or to dry grass generally, for the inertia of the bomb will cause it to bury itself in the earth before it explodes, causing frequently very little, if any, damage.

Moreover, these bombs are ordinarily provided with metal shells, which are intended to endanger life as well as injure property, and the weight of these metal shells renders it difficult to carry a large number of bombs, especially on the ordinary heavier than air aircraft.

My invention is intended to provide a comparatively light incendiary arrangement by which the incendiary projectile may be readily launched from the aircraft, and at the same time ignited, and falling through the air, will fall and rest on top of the roof of a building, or fall and remain on top of the ground, thus setting fire to any inflammable material it comes in contact with.

My invention will be understood by reference to the accompanying drawings, in which,

Figure 1 is a perspective view of an aero-

plane just after it has launched one of the incendiary projectiles;

Fig. 2 shows a section through a casing with connected parts, whereby the projectile may be conveniently stored on the aeroplane and may be launched and ignited when desired; and

Fig. 3 is a plan view of the top of the case, shown in Fig. 2, parts being shown in section.

1 represents an aeroplane of any suitable type having the usual floor 2, which floor is perforated to permit the projecting there-through of one or more cylindrical cases 3, each case being closed by a hinged door 4, whose free end is held up and supported by a toe 5 on a rod 6, which rod is normally held up in any suitable way, as by means of a spring 7, and may be pressed down by pressing on a pedal 8.

It will be seen that pressing down on this pedal will push the toe 5 downward allowing the door 4 to swing open.

Stored in the casing 3 is the projectile 9, which is in the form of a long woven sheath or tube, filled with incendiary material, and to the upper end of this sheath is connected a slow-burning fuse 10. This slow-burning fuse is preferably graduated as shown in Fig. 2. The rate of burning being known, and the height of the aircraft above the ground being known, if this fuse be ignited at the proper point, it will set fire to the inflammable column at any desired time before the said column reaches the ground, and thus will insure that the incendiary material is burning fiercely when it reaches the object to be set on fire.

Any suitable method for igniting this fuse at the desired point may be adopted. I have shown means for igniting the same electrically in Fig. 2, in which 12 represents a contact carried by the pedal 8, which makes electrical connection with the contact 13, and completes a circuit from the battery 14 through the coarse induction coil 15. This generates a current in the fine induction coil 16, and makes a spark between the points 17 and 18, igniting the fuse at the desired point.

The contact 13 and points 17 and 18 may be conveniently located on, but insulated from the cover 20, which is hinged at 21 to the case 3, and the hole 22 in said cover be-

ing made just large enough to conveniently feed the fuse through the same, and to draw the same to the desired position when ready for firing.

5 When the parts are in the position shown in Fig. 2, it will be seen that by pressing down on the pedal 8, the electric circuit will be completed, and the electric spark will ignite the fuse 10. At the same time the  
10 door 4 will be released, and the woven sheath containing the incendiary composition will drop out of the case 3, and fall downward as indicated in Fig. 1, the fuse  
15 10 being fired at the proper point corresponding to the height of the aircraft above the ground, the incendiary material will be ignited before the projectile reaches the ground, and it will burn fiercely for some-  
20 time after it comes to rest on the roof of a building or other structure, or on the ground, as the case may be.

It will be obvious that various other means for storing and launching the projectile, and for firing the same, may be adopted,  
25 if desired, and I do not wish to limit my invention to any specific means, or to any particular construction, combination, or arrangement of parts, except as may be required by the claims.

30 Having thus described my invention, what I claim and desire to secure by Letters Patent of the United States is:

1. An incendiary attachment for air craft comprising a long flexible tube made of  
35 combustible material and filled with inflammable composition, and a time fuse connected to one end of said tube and adapted to ignite the inflammable composition in said tube, with means for igniting said time  
40 fuse, substantially as described.

2. An incendiary attachment for air craft comprising a long flexible tube made of  
45 combustible material and filled with inflammable composition, and a time fuse connected to one end of said tube and adapted to ignite the inflammable composition in said tube, with means for igniting said time  
50 fuse, and for dropping said tube from the air craft, substantially as described.

3. An incendiary attachment for air craft comprising a long flexible tube made of  
55 combustible material and filled with inflammable composition, and a time fuse connected to one end of said tube and adapted to ignite the inflammable composition in said tube, with means for simultaneously igniting said time fuse and dropping said

tube from the air craft, substantially as described.

4. An incendiary attachment for air craft 60 comprising a long flexible tube made of combustible material and filled with inflammable composition, and a time fuse connected to one end of said tube and adapted to ignite the inflammable composition, with  
65 an electric circuit having a spark gap therein for igniting said time fuse, when desired, substantially as described.

5. An incendiary attachment for air craft 70 comprising a casing having a hinged bottom opening downward through the bottom of the air craft, a long flexible tube made of combustible material and filled with inflammable composition, mounted in said casing,  
75 a time fuse connected to one end of said tube and adapted to ignite the inflammable composition in said tube, and means for releasing said hinged bottom, thus dropping said  
80 tube from the air craft, substantially as described.

6. An incendiary attachment for air craft 85 comprising a casing having a hinged bottom opening downward through the bottom of the air craft, a long flexible tube made of combustible material and filled with inflammable composition, mounted in said casing,  
90 a time fuse connected to one end of said tube and adapted to ignite the inflammable composition in said tube, means for igniting said time fuse, and means for releasing said  
95 hinged bottom, thus dropping said tube from the air craft, substantially as described.

7. An incendiary attachment for air craft 95 comprising a casing having a hinged bottom opening downward through the bottom of the air craft, a long flexible tube made of combustible material and filled with inflammable composition, mounted in said casing,  
100 a time fuse connected to one end of said tube and adapted to ignite the inflammable composition in said tube, with means for simultaneously igniting said time fuse, and dropping  
105 said tube from the air craft, comprising an electric circuit with a spark gap therein, and a plunger provided with a toe adapted to normally lock said hinged bot-  
110 tom but to release same when desired and also to close said electric circuit and create a spark thus igniting said time fuse, substantially as described.

In testimony whereof, I affix my signature.

LEWIS NIXON.