

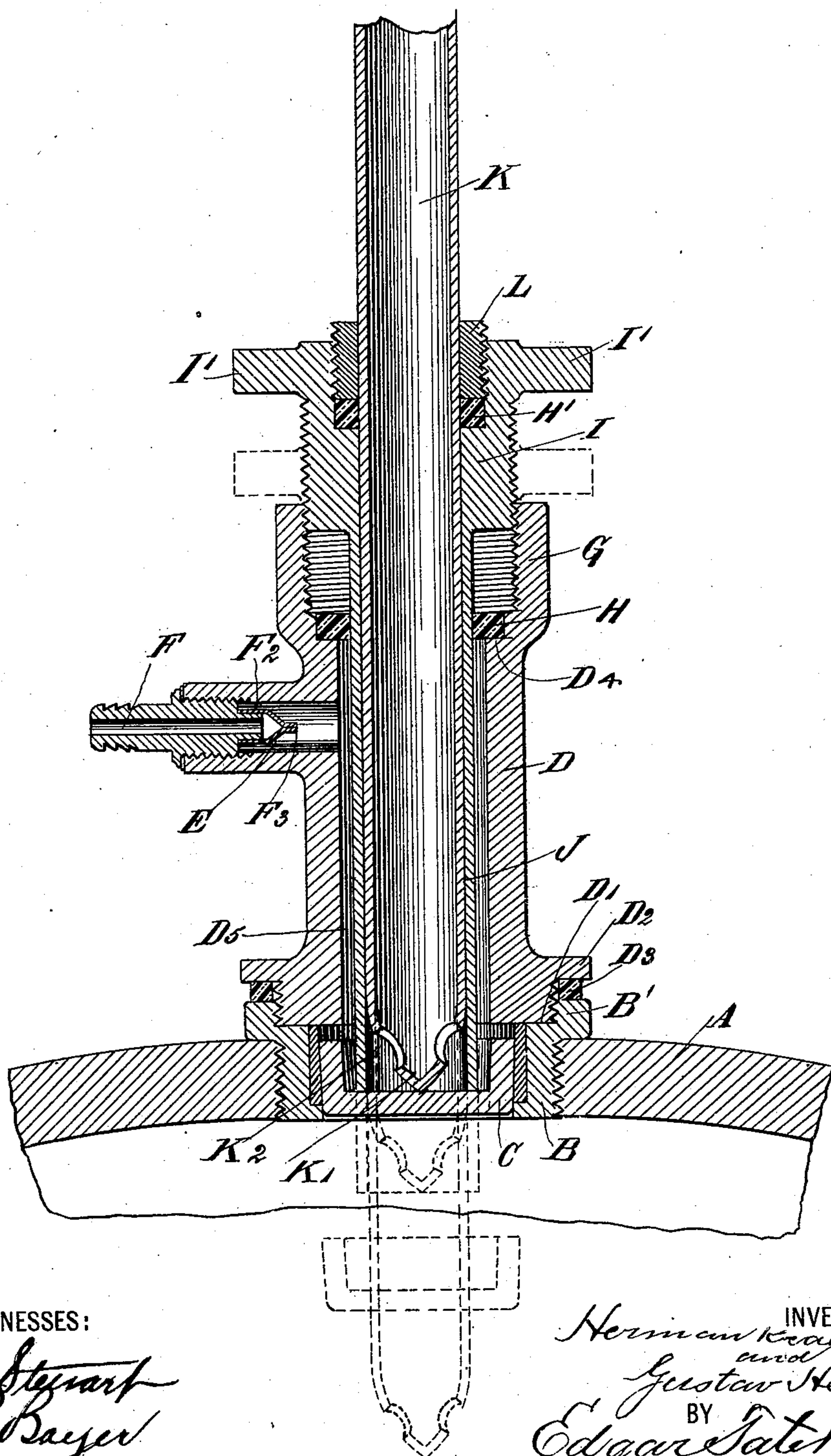
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Patented Nov. 11, 1902.

H. KRAEMER & G. HESSE.
TAPPING DEVICE.

Application filed July 25, 1901.

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

HERMAN KRAEMER AND GUSTAV HESSE, OF COLLEGEPOINT, NEW YORK;
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NEW YORK.

TAPPING DEVICE.

SPECIFICATION forming part of Letters Patent No. 713,113, dated November 11, 1902.

Application filed July 25, 1901. Serial No. 89,629. (No model.)

To all whom it may concern:

Be it known that we, HERMAN KRAEMER and GUSTAV HESSE, citizens of the United States, residing at Collegepoint, in the county of Queens and State of New York, have invented certain new and useful Improvements in Tapping Devices, of which the following is a full and complete specification, such as will enable those skilled in the art to which it ap-
10 pertains to make and use the same.

This invention relates to that class of devices which are forced into the bung-hole of a barrel, keg, or other vessel to drive the bung into the vessel and tap the contents thereof;
15 and the object of our invention is to provide a device of this class which is simple in construction and operation and by means of which the tapping of the vessel may be quickly and easily accomplished without use of a
20 hammer or similar device; and with this and other objects in view the invention consists of a device of the class specified constructed as hereinafter described.

This invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, in which the separate parts of our improvement are designated by suitable reference characters, said drawing being a central vertical section of our improved tapping device and showing the same
30 connected with a barrel or other vessel.

In the use of a device embodying our invention it is customary for the barrel or other vessel A to be provided with a bung-bushing B, screwed or otherwise secured therein and provided with an upwardly-directed flange or rim B', preferably of greater diameter than the body portion of the bushing and screw-threaded interiorly, and in the bushing B is
40 inserted the bung C, which may be of the type shown in the drawing or of any other preferred form.

Our improved beer-tapping device embodies a tubular casing D, screw-threaded at its lower
45 end, as shown at D', so as to be screwed into the flange B' of the bung-bushing, and above the screw-threaded portion D' is a flange D², beneath which is arranged a packing-ring D³.

At one side of the casing D is a laterally-
50 arranged pipe E, in which is secured an air-

inlet tube F, adapted exteriorly to receive a rubber tube in the usual manner and open the inner end of the tube F. Within the pipe E is secured a rubber valve F², the lips F³ of which are normally contracted, but will open
55 under pressure of air, and our improvement is adapted more particularly for tapping barrels, kegs, or other vessels containing beer or similar liquor or liquids containing gas or liquids under pressure, and the barrel or other
60 vessel A is supported with its bung-hole up, as shown in the drawing.

The top portion of the casing D is enlarged at the upper end thereof, as shown at G, and said enlarged portion is screw-threaded inte-
65 riorly, and at the bottom thereof is an annular shoulder D⁴, upon which is mounted a packing-ring H.

Within the screw-threaded extension or enlargement G is placed a screw-threaded plug
70 or head I, provided with projecting lugs or handles I' upon either side thereof and provided at its lower end with an integral downwardly-directed cylindrical or tubular extension or tube J, which fits within the casing
75 D, but is of such diameter as to form an annular air-space D⁵ between the same and said casing, and said tube is of such length as to project appreciably below the casing in the
80 normal position of the plug I, and said plug is exteriorly threaded, so that the rotation thereof causes it to descend into the extension G of the casing D and force the tube J downwardly.

The tapping-tube K may be of any desired
85 length and constitutes the draw-off tube and is provided with a conical or pointed lower end K', in which are formed a plurality of apertures K², through which the liquid or liquor is passed into and out through said
90 tube. The tube K is inserted through the head or plug I, and while fitting tightly therein is adapted to slide freely therein and in the tube J, and the upper end of the tube K is in practice provided with a spigot or other
95 suitable valve or draw-off device in the usual manner, said valve or draw-off device being not shown. The upper end of the plug or head I is centrally recessed, and placed therein is a packing-ring H', above which is placed
100

a nut L, which may be screwed down into said packing-ring in the usual manner, and the said nut L and plug I are correspondingly threaded.

5 The operation of this device will be readily understood from the foregoing description when taken in connection with the accompanying drawing and the following statement.

The appliance having been inserted in the
 10 bung-hole of the barrel by screwing the same into the flange B', the plug or head I is turned to bring the lower edge of its extension-tube J slightly in contact with the bung. The tapping-tube K is then drawn down so as to
 15 similarly rest upon the bung, and the nut L is tightened to the greatest possible extent against the packing H'. It will be manifest that within the scope of our invention other means may be employed for securing the tapping-tube adjustable to the head or plug I. The tubes J and K being thus in mutually-
 20 adjusted position, the head or plug is rotated by means of its lug or handle I' or through the medium of any suitable instrument applied to it, so that the lower edge of the extension-tube J bears down upon the bung and either drives it into the barrel or breaks
 25 through it and forces the lower portion thereof into the barrel, this being dependent upon the style of bung which has been employed to seal the package. As the tapping-tube K is secured in its adjusted position by means of the nut L, it will be carried downwardly with the tube J, and will therefore be properly and effectively in position to receive the
 35 fluid therethrough the moment it is able to leave the barrel. It is not essential that the lower end of the tapping-tube K should be actually in contact with the bung, nor is it essential that the tapping-tube K should be actually in contact with the bung, nor is it essential that the tapping-tube perform any of the work of pushing in the bung. The tapping-tube may immediately or at any
 40 time during the constant or intermittent withdrawal of the contents of the barrel be vertically adjusted relatively to the plug or head I and to the liquor in the barrel by loosening the nut L, sliding the tube K downwardly, and then again tightening the nut L. As the contents of the barrel are withdrawn and the pressure in the cask becomes less the escaping air-pressure from the outside of the tube F will open the lips F³ of
 55 the valve F² and permit sufficient air to enter to maintain the proper pressure in the barrel; but however great the inside pressure of the gas of the beer the liquid itself cannot escape through the valve F², as its lips F³ will be but more tightly contracted. The especial form of valve is not new, and this portion of the device forms no essential part of the invention, except broadly as an element contributing to the effective operation of the device. The liquor flows through
 65 the opening K² into the pipe K and out through the spigot K³ thereof. The packings

H and H' make the casing D and the tube J tight against liquid air or gas. The packing H' is tightened by the nut L after the tube
 70 K is once adjusted, and the packing H' may be tightened by screwing down the plug I.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A beer-tapping device comprising a tubular casing screw-threaded at its lower end and provided with a flange or rim above the threaded portion thereof, said casing being enlarged at its upper end and interiorly
 80 threaded, a packing-ring placed in the bottom of the enlarged portion, a screw-threaded plug or head screwed into said enlarged portion of said casing and provided at its lower end with a tube which passes downwardly
 85 through said casing and is of less diameter than said casing, a tapping-tube passed through said tubular plug or head and through the tube connected therewith, said plug or head being provided in its upper end
 90 with an enlarged screw-threaded opening and a packing-ring placed therein and a nut screwed thereonto through which said tapping-tube passes, said casing being also provided at one side with a tubular extension
 95 forming an air-pipe coupling, substantially as shown and described.

2. A device of the class described comprising a tubular casing, the lower end of which is screw-threaded and provided with a flange
 100 or rim above the screw-threaded portion, the upper end of said casing being enlarged and interiorly threaded, a tubular plug or head screwed into the enlarged portion at the upper end of said casing and provided at its
 105 lower end with a tube which passes downwardly through said casing, said screw-threaded plug or head being also provided at its upper end with an enlarged central opening and a nut screwed thereonto and a tapping-tube
 110 which passes through said nut and through said tubular plug or head and through the tube at the lower end thereof, substantially as shown and described.

3. A device of the class described comprising a tubular casing, the lower end of which is screw-threaded and provided with a flange
 115 or rim above the screw-threaded portion, the upper end of said casing being enlarged and interiorly threaded, a tubular plug or head screwed onto the enlarged portion at the upper end of said casing and provided at its
 120 lower end with a tube which passes downwardly through said casing, said screw-threaded plug or head being also provided at its upper end with an enlarged central opening and a nut screwed thereinto, and a tapping-tube
 125 which passes through said nut and through said tubular plug or head and through the tube at the lower end thereof, the main tubular casing being also provided at one side
 130 with a tubular extension and air-pipe coupling, substantially as shown and described.

4. A device of the class described comprising

ing a tubular casing, the lower end of which
is adapted to be connected with a bung-bush-
ing, said casing being enlarged at its upper
end and interiorly threaded, a tubular plug
5 or head, adapted to be screwed into the en-
larged upper end of said casing and provided
at its lower end with a tube which passes
downwardly through and is of less diameter
than said casing, a tapping-tube adapted to
10 be passed downwardly through said tubular
head or plug and the tube connected with the
lower end thereof, and a tubular extension
connected with the side of the main tubular

casing and adapted to serve as an air-pipe
connection, substantially as shown and de- 15
scribed.

In testimony that we claim the foregoing as
our invention we have signed our names, in
presence of the subscribing witnesses, this
17th day of July, 1901.

HERMAN KRAEMER.
GUSTAV HESSE.

Witnesses:

F. A. STEWART,
L. R. BAYER.