

HOLLY'S IMPROVED WATER WORKS,

DIRECT PUMPING PLAN,

Combines, with other advantages over older Systems, the following:

1. *Secures by Variable Pressure a more Reliable Supply of Water for all purposes.*
2. *Less Cost for Construction.*
3. *Less Cost for Maintenance.*
4. *Less Cost for Daily Supply by the use of Holly's Improved Pumping Machinery.*
5. *Affords the Best Fire Protection in the World.*
6. *Largely Reduces Insurance Risks and Premiums.*
7. *Dispenses with Fire Engines, in whole or in part.*
8. *Reduces Fire Department Expenses.*

HOLLY'S NEW AND IMPROVED COMPOUND PUMPING ENGINE,

Is so Arranged that it may be operated on the
Compound, Low Pressure, or High Pressure
Principles,

And Changed from one to the other at pleasure, without stopping. This arrangement is essential to securing

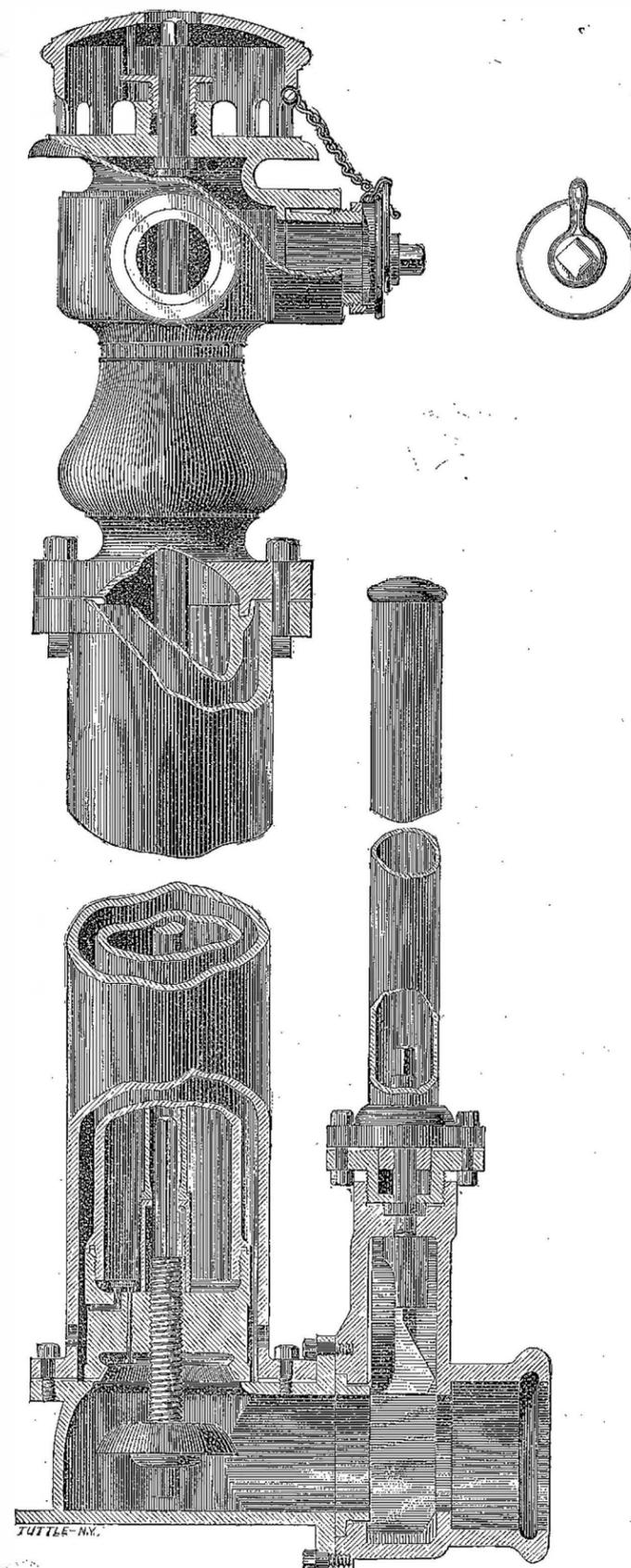
Economical Daily Pumping, and Prompt Increase of Power for Efficient Fire Protection.

In Daily Working and Special Tests, these Engines show a duty equal to 65,000,000 to 81,000,000 and over, Pounds of Water raised one foot with One Hundred Pounds of Coal, when Pumping directly into the Mains. Water Works on this Plan have been put in Successful Operation by this Company within the last few years in over Seventy-Five Cities and Villages in the United States.

For information, by Descriptive Pamphlet or otherwise, address the

HOLLY MANUFACTURING COMPANY,

LOCKPORT, N. Y.



B. HOLLY'S

PATENT

FIRE HYDRANTS.

SOLE AGENT,

4th & Wacoula Streets. ST. PAUL, MINN

-THE-

Holly Manufacturing Company,

LOCKPORT, N. Y.,

MANUFACTURERS OF

B. HOLLY'S PATENTED SYSTEM OF

Water Supply and Fire Protection

FOR CITIES AND VILLAGES,

DIRECT ACTING STEAM PUMPS,

Rotary and Reciprocating Power Pumps.

5685.F

T. T. FLAGLER, *President.*
 JAS. JACKSON, JR., *Vice-Pres't.*
 C. G. HILDRETH, *Secretary.*
 H. H. FLAGLER, *Treasurer.*
 B. HOLLY, *Consulting Engineer.*
 H. F. GASKILL, *Superintendent.*

OFFICE OF
THE HOLLY MANUFACTURING COMPANY,

LOCKPORT, N. Y., 1881.

The attention of Water Works Managers and contractors is respectfully called to HOLLY'S PATENT FIRE HYDRANTS which are offered at reduced prices for the purpose of securing their still more general introduction. Nearly 7,000 have been sold within the last six years to more than 75 cities and villages throughout the United States, and have always given entire satisfaction when properly set. Following are some of the principal claims we make for the *Holly Hydrant*, and applicable to all the various patterns:

Being made of extra strength, and for durability and service they will stand extreme water pressures.

The valves may be readily replaced without digging up the Hydrant.

Having an extra frost jacket, and a drip-valve, they are anti-freezing.

The main valve closes with the current, and when firmly closed will not leak a drop.

Waste of water, and tampering with hydrants by unauthorized persons, is effectually prevented by a guard at the top, thus requiring the use of a special wrench to operate the valve.

We are prepared to sell these hydrants at a lower price than any other reliable hydrant now manufactured.

The drip-valve is without springs, and positive in its action. It is held open by the main valve when the latter is closed, and closes itself immediately when the main valve is opened.

The main valve seat is a leather gasket (costing but a few cents to replace), which serves also as a packing for the lower joint of the inner pipe.

The screw and nut of the main valve stem are placed immediately above the valve itself, and so secured as to prevent any vibration or rattling of the stem and valve when open, and under heavy water pressure.

HYDRANTS WITH SPECIAL VALVES.

This Hydrant is made with a gate at the base (as shown by cut), if desired, which is a great advantage, in case of replacing a hydrant, or taking one up for any purpose.

We also make this hydrant with independent brass-faced slide valves before each hose take-off—an advantage which will be at once appreciated by Chiefs of Fire Departments. By this arrangement, should it become necessary from any cause, such as the bursting of one line of hose, or its being abandoned by the pipemen, it can be shut off without stopping the remaining stream.

Directions for Taking Out Valve.

Should it be desired to repair any of the working parts without digging up the ground, it may be effected by simply taking out four bolts at the surface of the ground, and withdrawing the inner pipe, together with the main valve, valve-seat and drip-valve, all of which can as easily be replaced and made secure again, by tightening the four bolts first removed.

PRICES, INCLUDING FROST JACKET.

PATTERN NUMBER.	NUMBER OF HOSE ATTACHMENTS.	DIAMETER OF VALVE.	DIAMETER OF SUPPLY PIPE.	WITHOUT INDEPENDENT SLIDE VALVES.	WITH INDEPENDENT SLIDE VALVES.	WITE GATE AT BASE.
1	One.	3 inches.	3 or 4 inches.	\$30 00 each.		\$8.00 Extra.
2	Two.	3 "	3 or 4 "	33 00 "	\$43 00 each.	
3	One.	4 "	4 inches.	37 00 "		
4	Two.	4 "	4 "	40 00 "	50 00 "	Special.
5	Two.	5 1/2 "	6 "	50 00 "	60 00 "	
6	Three.	5 1/2 "	6 "	53 00 "	63 00 "	
7	Four.	6 "	6 "	60 00 "	80 00 "	

All Hydrants coated inside with black varnish. Discount.....per cent.

The above prices are based upon the case being four feet long. For longer cases add 50 cents per foot,

Special discounts will be made for orders in car lots (40 to 50 hydrants), including delivery, if desired.

Numbers 1 and 3 (single nozzle hydrants), can be made with or without the gate at base, as ordered.

Numbers 2, 4, 5, 6 and 7 can be made with or without the gate at base, or with or without the independent slide valves before nozzles, as ordered.

Hydrants with take-offs for steamer suction, subject to special prices, which will be given upon application.

In ordering, parties will, if convenient, please send a hose coupling from which we will fit hydrant take-offs, or at least name the standard of coupling in use.

Soliciting your orders, we are

Yours Respectfully,

JAMES T. CUSHING, General Western Agent,
 Room 8, No. 149 LaSalle St., CHICAGO.

HOLLY MANUFACTURING COMPANY.

PHILIP BOYD

ROCKFORD, ILL.

309 N. WABASH ST. ST. PAUL, MINN.