

- [54] **LIGHTING SYSTEM FOR HAZARDOUS AREAS**
- [76] **Inventor:** John M. Betzvog, Jr., 919 NW 56th, Seattle, Wash. 98107
- [21] **Appl. No.:** 204,465
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- [51] **Int. Cl.⁵** F21V 25/00
- [52] **U.S. Cl.** 362/310; 362/264; 362/294; 362/295; 362/276; 362/373
- [58] **Field of Search** 362/264, 294, 295, 373, 362/310, 267, 276; 174/47

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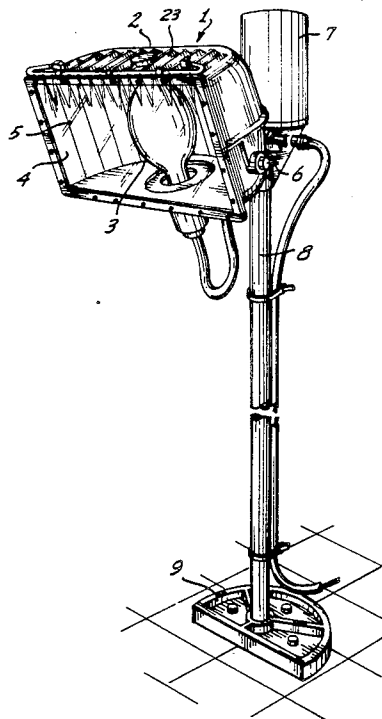
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[57] **ABSTRACT**

Conduits having the electric wiring for supplying power to lighting fixtures in an area classified as hazardous by reason of the presence of potentially explosive dust, vapor or gas have unobstructed interior passages for conveying nonexplosive gas under pressure from outside the hazardous area to each fixture. The pressure of gas in the conduit network can be monitored automatically and control mechanism can be provided to shut off the supply of electric power to the fixtures if the pressure falls below a predetermined pressure or a dangerous over-pressure condition occurs. At each fixture, the nonexplosive gas can be discharged along the face of the transparent fixture lens and/or along an exterior surface of the fixture housing to prevent build-up of potentially explosive agents and to cool the housing.

13 Claims, 4 Drawing Sheets



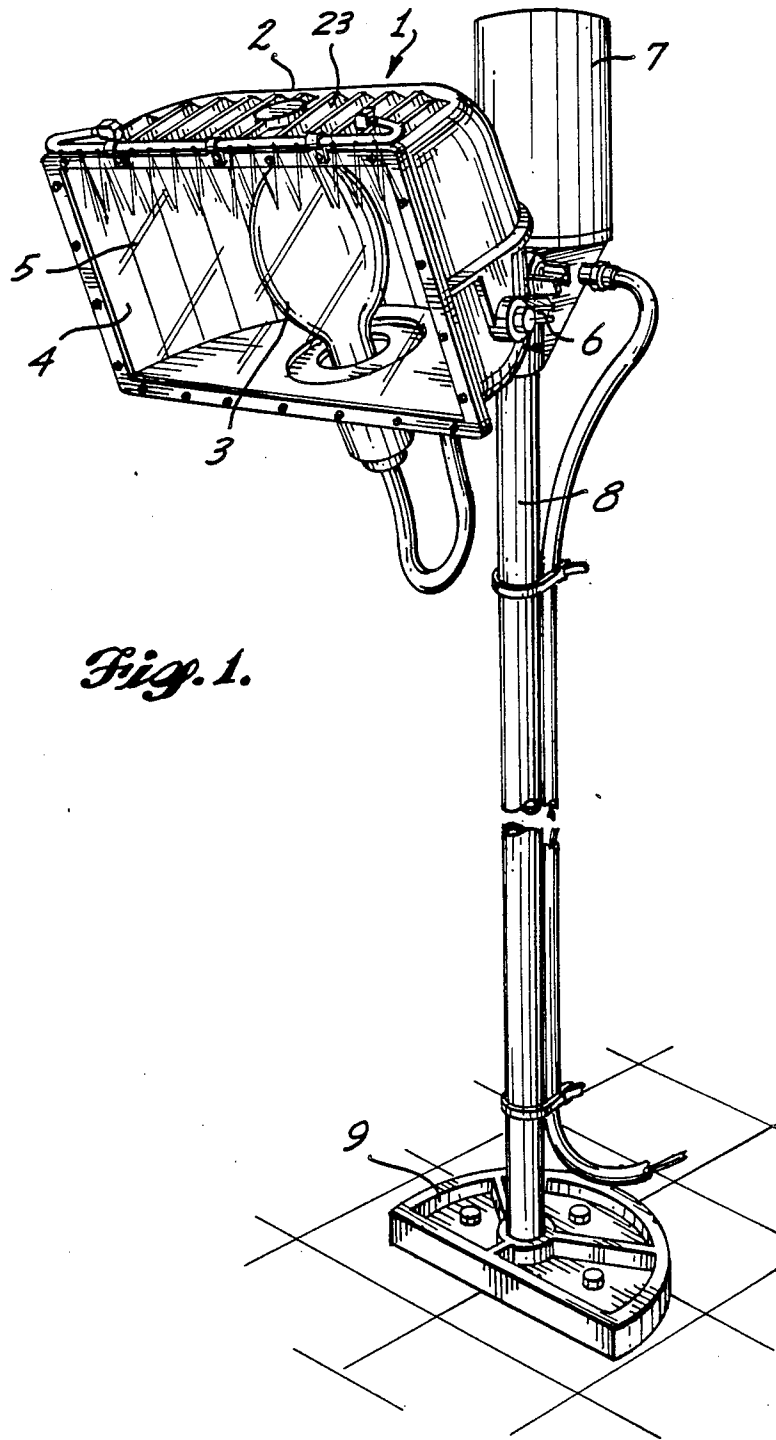


Fig. 1.

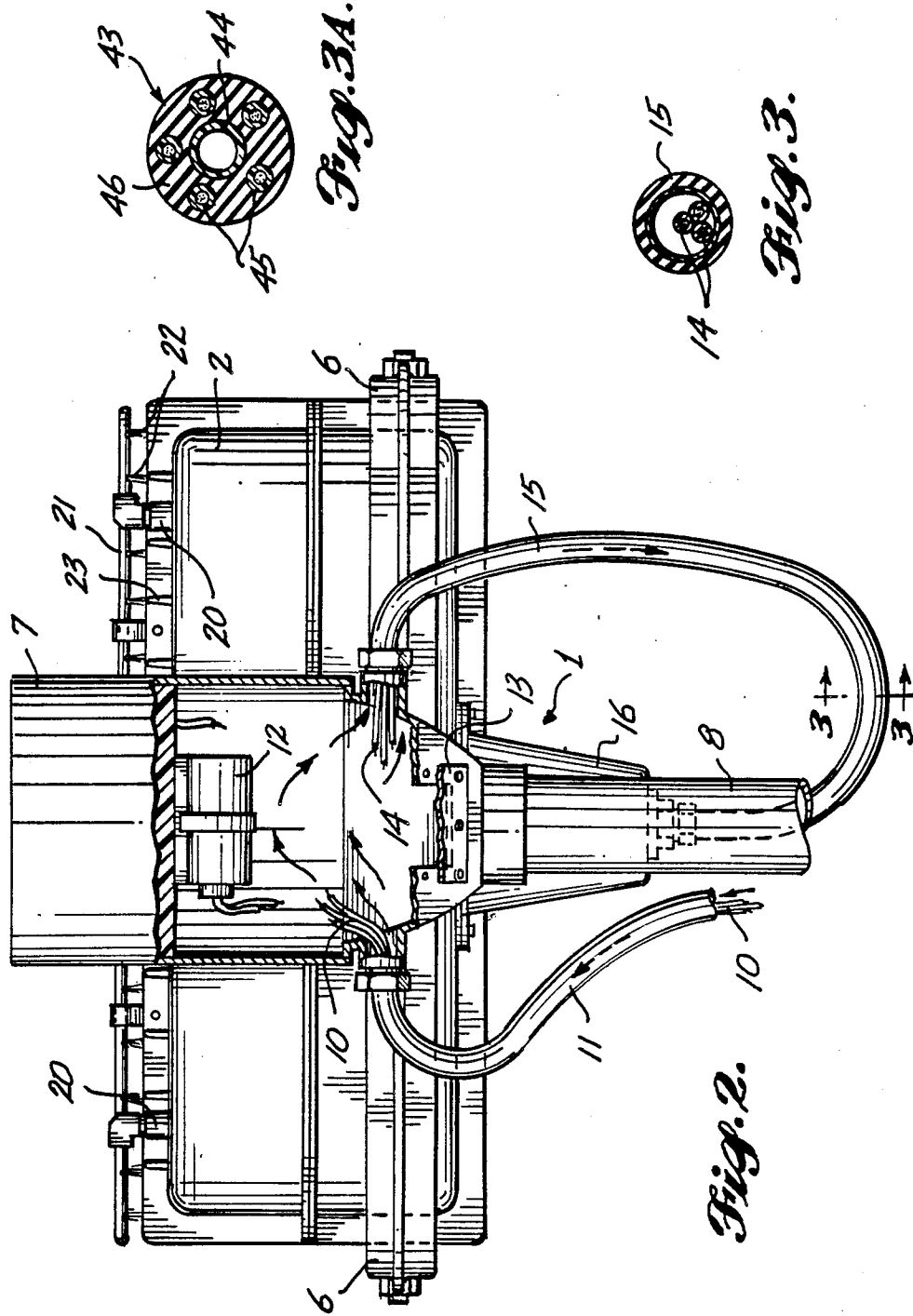


Fig. 3A.

Fig. 3.

Fig. 2.

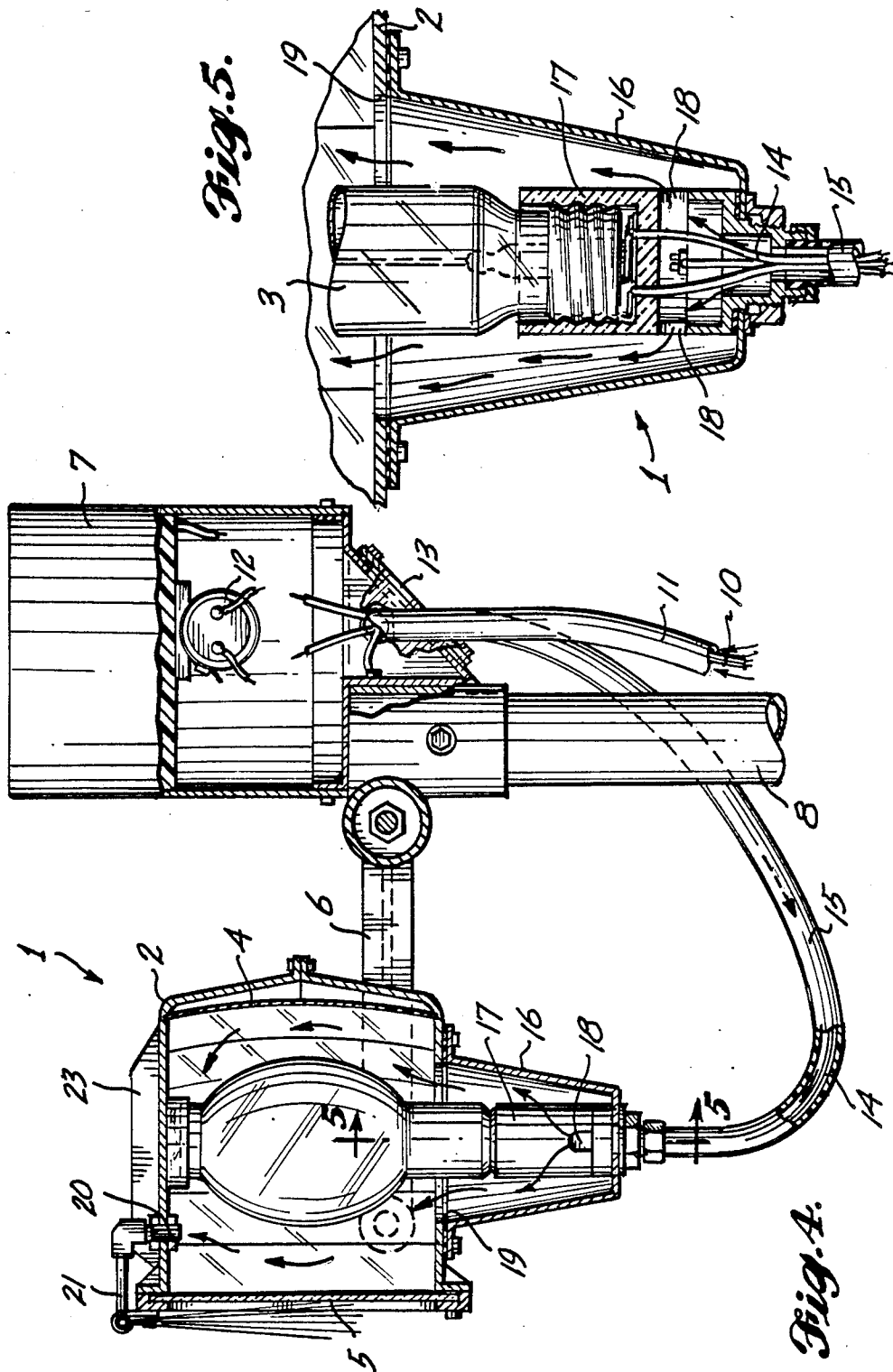


Fig. 4.

Fig. 5.

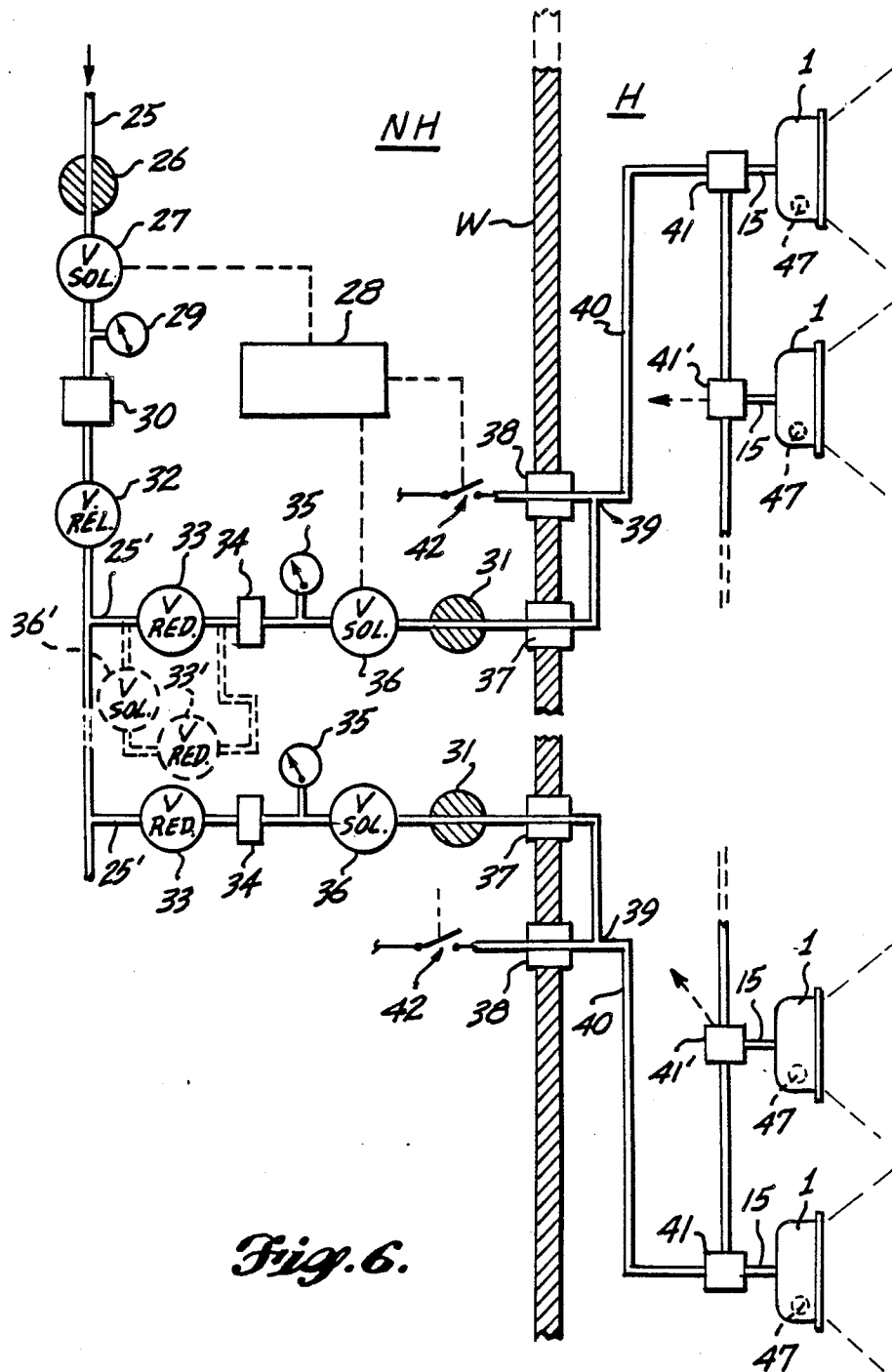


Fig. 6.

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