drilled in the orifice fitting **76**. It is delivered through the bottom of this passage and out that opening. However, fluid is not permitted to flow because there is a pressure set check valve to be overcome. This pressure set check valve is made dependent on line pressure. Specifically, line pressure is introduced from the supply passage **22** through a lateral line **78**, and below a plunger **79**. The plunger **79** supports a plug **80** which blocks flow out through the passage **77**. The plug **80** is smaller than the passage and hence, any gas flow escaping that contact flows downwardly and into the port **81** when contact between plug **80** and fitting **76** is broken. The port **81** includes the appropriate fittings **82** and connects through the outlet line **83** to a sample storage container. The plunger **79** is forced upwardly by a bias spring **84** which is of sufficient strength to force the plug **80** upwardly. However, plug movement is controlled primarily by the cross-sectional area of the plunger **79** and pressure which is exposed to it. Representative pressure levels will be given hereinafter.

Consider a typical situation in operation. Assume that the sampler **70** is installed on a natural gas line at 1,000 psi. Fluid flows from left to right as viewed in FIG. **2**. The inlet means **15** draws in fluid flow, and it flows into the inlet passage **22** assuming the valve handle **20** has been operated to open the valve **18**. This fluid flows to the plunger **40**. It is captured in the passage **42** when the plunger is operated downwardly. Surplus fluid is delivered away from the plunger. One outlet is through the line **29** which flows to the timed controller **30** which times application of fluid to the fluid motor at the top end which operates in the same fashion as shown in FIG. **1** of the drawings. That is, the plunger **40** is driven downwardly by the piston, and compression of the captured gas occurs in the passage **42**. *As can be seen in FIG. 2, fluid or gas from the pipeline and rigid sample chamber 42 is employed (through passage 38, line 29, and controller 30) to actuate plunger 40, and the volume of gas sampled after actuation of plunger 40 is fresher or more representative of that flowing in the pipeline at the time of the sample.*

The gas is compressed, forced downwardly, and the flows past the needle valve. It flows into the small passage **77** through the orifice insert **76**. When this pressure is sufficiently high, it will force the plug **80** slightly downwardly so that gas flows around the plug **80**. Gas flows through the outlet port or passage **81** into the fitting **82** and through the line **83** for delivery to the sample storage chamber which is not shown. The gas so stored is recovered for sample testing purposes.

Consider representative pressures which might occur in the sampler **70**. The passage **78** is provided with gas at line pressure or 1,000 psi in this example. It is applied below the plunger **79**. The plunger **79** has a ratio of area to the plug **80** of about 2:1 and provides multiplication of approximately two fold in that event. That is, gas samples delivered through the passage **77** must exceed approximately two fold line pressure. In other words, the plug **80** will not open until pressure bearing against it at the top end is in excess of about 2,000 psi in this example. Gas flows upwardly through the supply passage **22** and is delivered into the chamber **42**. When the plunger **40** moves downwardly into the seal **41**, pressure rises in the chamber **42**. This pressure rise is observed therebelow in the passage **77**. When that pressure becomes sufficient, the plug **80** is forced backwardly, opening slightly and gas flows into the port **81**. Fluid then flows while exceeding this representative pressure. That is, the gas that is delivered through the outlet line **83** is compressed to a sufficient pressure that is forces open the tapered needle valve **73**, and also flows past the plug **80**.

Assume that the storage container for the sample is maintained at a pressure which is low. In that event, the sample is simply delivered in regular fashion into that storage vessel. If however, the back pressure of the storage vessel is much greater than the line pressure, that does not pose any problem either. Sample cannot escape back into the equipment because there is a check valve at the valve **73**. Accordingly, the pressure on the compressible gas is raised sufficiently high that it will overcome practically any back pressure at the storage container. Moreover, pressure is isolated between strokes so that the storage container does not bleed through the sampling valve just described.

Consider proportioning of the present apparatus. Sample again is captured in the range of about one part in 10^5 up to about one part in 10^9. Obviously, these are subject to scale factors and can be varied to a desired output sampling rate.

The samplers **10** and **70** utilize the same basic structural components. They both terminate at a remote end which incorporates a fluid motor. In both instances, the motor is preferably single acting with a return spring. That is, fluid pressure from the pipeline is used to drive the piston. This avoids the necessity of providing a remote fluid supply at a remote location. Just as importantly, pipeline pressure is not a limitation on the operation of the fluid motor because it is provided with greater cross-sectional area so that even a low pipeline pressure system can provide sample against a high back pressure storage device.

While the foregoing is directed to the preferred embodiment, the scope thereof is determined by the claims which follow:

What is claimed is:

1. An assembly for obtaining a fluid sample from a pressurized pipeline comprising:

(a) an elongate body having

(i) a first end formed to connect to a pipeline to position a pressurized fluid inlet *probe* in the pipeline to receive pressurized fluid;

(ii) a central body portion connected to said first end; and

(iii) a second end deployed from said first end;

(b) a fluid flow *inlet* line *extending through said elongate body and* connected from said fluid inlet *probe* to deliver a flow of fluid;

(c) fluid sampling means connected to said fluid flow *inlet* line **[**to deliver fluid thereto**]** *such that fluid is delivered to said fluid sampling means* in a volume in excess of said sample, *said sampling means periodically removing fluid from said fluid flow inlet line*;

(d) **[**said sampling means periodically removing fluid from said fluid flow line;

(e)**]** outlet means connected to said sampling means for delivery of a fluid sample **[**without regard to**]** *whether* the pressure in the pipeline *exceeds that in a fluid sample vessel or the pressure in the fluid sample vessel exceeds that in the pipeline*;

[(f)**]** (*e*) check valve means cooperative with said outlet means to enable fluid to flow through said outlet means to overcome back pressure encountered by fluid flow;

[(g)**]** (*f*) *said fluid sampling means including a* rigid *sample* chamber connecting means connecting said *fluid* sampl**[**e**]***ing* means and check valve means; and

[(h)**]** (*g*) motor means in said body for operating said sampling means to direct fluid through said outlet means, *said motor means being in fluid communication with the pipeline through said fluid sampling means,*