CLAIM(S):

1. A manifold assembly for use with a filter capsule comprising a filter capsule housing including at least a filter inlet port and a filter outlet port, the manifold assembly comprising:

a manifold;

a carriage assembly for receiving a filter capsule, the filter capsule having at least a filter inlet port and a filter outlet port;

a pivotable lever; and,

a pair of first shafts; a pair of second shafts; and a pair of third shafts;

(a) the manifold having at least a manifold inlet port and a manifold outlet port; a top wall; opposing first and second side walls, the first and second side walls each including, passing through the respective first and second side walls: a vertical slot, a horizontal slot, and a first manifold through hole for one of the pair of first shafts for engaging the manifold with the carriage assembly; a rear wall; a guide rod arranged parallel to, and spaced away from, the rear wall;

(b) the carriage assembly having a top wall, the top wall including a guide rod opening passing through the top wall; a front wall with a cut out for receiving a filter capsule housing; opposing first and second side walls, the first and second side walls each including a vertically arranged member having a vertical slot passing through the vertical member for one of the pair of first shafts for engaging the manifold with ~~a~~ the carriage assembly, a vertical member through hole for receiving ~~a~~ one of the second ~~rod~~ shafts for engaging the manifold with the carriage assembly and the pivotable lever, and a shelf with a first shoulder and second shoulder, the shelf being configured to receive, between the first and second shoulders, a protrusion on the filter capsule housing;

(c) the pivotable lever being pivotable between a first position allowing the manifold assembly to receive the filter capsule, and a second position engaging the filter capsule with the manifold assembly such that the filter inlet port and the filter outlet port are moved toward the

manifold inlet port and the manifold outlet port; the pivotable lever including a pair of lever arms, each of the pair of lever arms including a first lever through hole for one of the pair of second shafts for engaging the carriage assembly with the manifold and the pivotable lever, and a second lever through hole for one of the pair of third shafts for engaging the manifold with the pivotable lever, the second lever through hole being spaced away from the first lever through hole;

(d) each of the pair of first shafts passing through the respective first manifold through holes and the vertical slots passing through the vertical members of the carriage assembly;

(e) each of the pair of second shafts passing through the respective vertical slots of the manifold, the vertical member through holes of the carriage assembly and the first lever through holes; and

(f) each of the pair of third shafts passing through respective second lever through holes and the horizontal slots of the manifold.

2. The manifold assembly of claim 1, wherein the carriage assembly includes a strut with a front wall arranged at an angle for aligning with an angled extension on the filter capsule housing.

3. A method of moving a filter capsule along a manifold assembly, the method comprising:

seating a filter capsule comprising a filter capsule housing including at least a filter inlet port and a filter outlet port on a moveable carriage assembly of a manifold assembly, the manifold assembly comprising:

a manifold; the carriage assembly; a pivotable lever; and, a pair of first shafts; a pair of second shafts; and a pair of third shafts; (a) the manifold having at least a manifold inlet port and a manifold outlet port; a top wall; opposing first and second side walls, the first and second side walls each including, passing through the respective first and second side walls: a vertical slot, a horizontal slot, and a first manifold through hole for one of the pair of first shafts for engaging the manifold with the carriage assembly; a rear wall; a guide rod arranged parallel to, and spaced away from, the rear wall; (b) the carriage assembly having a top wall, the top wall including a guide rod opening passing through the top wall; a front wall with a cut out for receiving a filter capsule housing; opposing first and second side walls, the first

and second side walls each including a vertically arranged member having a vertical slot passing through the vertical member for one of the pair of first shafts for engaging the manifold with ~~a~~ the carriage assembly, a vertical member through hole for receiving ~~a~~ one of the second ~~rod~~ shafts for engaging the manifold with the carriage assembly and the pivotable lever, and a shelf with a first shoulder and second shoulder, the shelf being configured to receive, between the first and second shoulders, a protrusion on the filter capsule housing; (c) the pivotable lever being pivotable between a first position allowing the manifold assembly to receive the filter capsule, and a second position engaging the filter capsule with the manifold assembly such that the filter inlet port and the filter outlet port are moved toward the manifold inlet port and the manifold outlet port; the pivotable lever including a pair of lever arms, each of the pair of lever arms including a first lever through hole for one of the pair of second shafts for engaging the carriage assembly with the manifold and the pivotable lever, and a second lever through hole for one of the pair of third shafts for engaging the manifold with the pivotable lever, the second lever through hole being spaced away from the first lever through hole; (d) each of the pair of first shafts passing through the respective first manifold through holes and the vertical slots passing through the vertical members of the carriage assembly; (e) each of the pair of second shafts passing through the respective vertical slots of the manifold, the vertical member through holes of the carriage assembly and the first lever through holes; and (f) each of the pair of third shafts passing through respective second lever through holes and the horizontal slots of the manifold; and,

moving the carriage assembly and the seated filter capsule from a first position wherein the filter inlet and outlet ports are spaced away from the manifold inlet and outlet ports, to a second position wherein the filter inlet and outlet ports are moved toward the manifold inlet and outlet ports.

4. The method of claim 3, wherein a first conduit passes through the manifold inlet port, and a second conduit passes through the manifold outlet port, and moving the carriage assembly and seated filter capsule from the first position to the second position includes engaging the first conduit with the filter inlet port and engaging the second conduit with the filter outlet port.

5. The method of claim 3 or 4, further comprising moving the carriage assembly from the second position to the first position to disengage the filter inlet and outlet ports from the first and second conduits.

6. A method of filtering fluid, the method comprising:

seating a filter capsule comprising a filter capsule housing including at least a filter inlet port and a filter outlet port on the carriage assembly of the manifold assembly of claim 1 or 2, wherein first and second conduits pass through the manifold inlet and outlet ports respectively;

moving the carriage assembly and the seated filter capsule from a first position wherein the filter inlet and outlet ports are spaced from the manifold inlet and outlet ports, to a second position wherein the first and second conduits are sealingly engaged with the respective filter inlet and outlet ports;

passing fluid through the first conduit in the manifold inlet port and the filter inlet port through a filter comprising a porous filter in the filter capsule, and passing filtered fluid through the outlet port of the filter capsule and the second conduit in the manifold outlet port.