Reply to Kline's response to "Straight Forks and Pneumatic Tires: Historicizing Duchamp's *Bicycle Wheel* of (1913)"

"The factor in the comfort of the fork, its springiness or compliance,the degree to which it will bend in response to a bump in the road, is the horizontal displacement of the fork tips from the straight line passing through the head tube. A curved fork and a straight fork with the same position of fork tips will have about the same compliance."

I don't think it's that simple, and particularly not with a fork made of taper-gauge tubing (such as Reynolds –wall thickness kept constant by making it thinner at the lower end before the tubing is rolled do make the blades taper). As Dick miller surmises, the curved part of the fork, which nearly reaches the horizontal, will give it somewhat more compliance than one which achieves the same trail with straight blades. Even a fork with straight blades will have a horizontal component of flex, because the head tube is at an angle and the blades are angled slightly more. But with a curved fork, there is more of a vertical component to the flexing –and it is the vertical displacement, not the horizontal displacement, which cushions against bumps in the road.

But in any case, the compliance of the fork is still much less than
that of the pneumatic tire.

"By 'straight', I think John means in line with the head tube."

Yes, that was the case with the early safety bicycles shown in Sharp’s book, to which I gave page references.

“There are road forks which have straight blades which are angled forward so that they have trail.”

True, and they would have even more trail if they were not angled forward.

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